

The Supreme Duty of this Nation Is to Fight

# Manufacturers RECORD

An Exponent of Americanism

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## Every Suggestion of Peace Except Based on Unconditional Surrender of Germany and Punishment of Germany's Criminals Is a Tribute to Crime and an Insult to the God of Justice and Morality

The supreme question before this country is to fight, and fight for its own life, for civilization and for Christianity itself, to the utter extermination of the accursed power of Germany, which has filled the world with blood and sorrow.

This is no time to talk of peace or to think of peace.

Any man in this country, or in that of any of the Allies, who utters one word in behalf of peace until Germany has been beaten to its knees, is false to the greatest moral issue which the world has ever faced.

Peace talk is pro-German talk; it is talk with rampant, blood-stained, red-handed murderers, and international and individual rapists, and is a disgrace to any man of moral character who utters a word in its behalf.

Indeed, no man or woman having a due appreciation of the fearful immorality of Germany can possibly look with any degree of favor whatsoever upon any other peace with Germany than the peace which the law makes with the individual murderer and rapist when forced to pay the just penalty of his crime.

This is not the time to talk peace.

This is the time to stir the fighting spirit of America, and in this way revivify and strengthen the fighting spirit of England, France, Belgium, Italy, Serbia and Roumania, who for nearly four years have poured out their blood to save the world from destruction by barbarism.

Any suggestion of peace on any other terms than the complete destruction of the military power of Germany and the punishment unto death of those responsible for Germany's actions would be merely the offering of a premium upon crime, and such a suggestion would be a disgrace to the moral fiber of any man who uttered the thought.

There can be no peace with the red-handed murderer, no peace with the rapist except that peace which the law enforces in all civilized communities against such black crimes, and there can be no other basis of peace with Germany than the enforcement of the same law and to the same extent.

This has been the position of the Manufacturers Record from the beginning of this great contest, and from this there cannot be any dissent by any right-minded, honest-hearted, moral-thinking man.

We cannot think of placing a premium upon such crimes without disgracing our mothers, our wives, our daughters and all womanhood.

We cannot think of welcoming back without contrition and without punishment the cold-blooded murderer and outrager of women and children, neither can we think of welcoming back into world society, except through punishment and contrition, those who internationally and individually have stained the pages of history with blood and sorrow, and as never before in all human experience.

This is no time to talk peace.

This is the time to talk war, to talk fight, the time when the nation, like the individual community, must determine to suppress the criminal rather than yield to his crimes.

This is the time when the nation on bended knees may well ask Almighty God to strengthen its power to fight in order that it may do the work to which He has called us as clearly as He ever called any man or any nation to any great task since the beginning of time.

Our supreme duty is to fight.

The supreme business of this nation is to win the war, and never to count that it has been won until there is a complete, unconditional surrender by Germany, and until Germany's murderers, from the highest on the throne, have paid the full penalty of their crimes.

President Church of the Carnegie Institute, one of the great leaders and thinkers in American education, has discussed this question with wonderful force and clearness. His views will be found in this issue.

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# MANUFACTURERS RECORD

DEVOTED TO THE UPBUILDING OF THE NATION THROUGH THE DEVELOPMENT OF  
THE SOUTH AND SOUTHWEST AS THE NATION'S GREATEST MATERIAL ASSET

Trade-Name Registered in the U. S. Patent Office

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## THE PRICE OF PEACE.

Peace without Justice is a low estate—

A coward cringing to an iron Fate!

But Peace through Justice is the great ideal—

We'll pay the price of war to make it real.

—Henry Van Dyke.

## THE NATION'S SUPREME DUTY IS TO FIGHT.

THE supreme duty of this nation today is to  
fight. Everything which magnifies and increases  
the fighting spirit and fighting power of our country  
should be stimulated to the utmost extent of our  
ability.

Everything which minimizes or weakens this  
fighting ability, mentally or physically, should be  
crushed by individual and Governmental activity.  
Our task is to fight and fight with all the latent  
power of the nation developed to the last ounce  
of its fighting strength. Into this fight, we must  
throw our whole soul, we must give to this supreme  
issue of civilization every ounce of mental and  
physical potentiality.

The call comes from God himself, if ever there  
came a call to man on earth to do His work, and  
the call to every individual should be heard as the  
call of God to a duty which equals the highest call  
that ever came to man. The call of God to Ado-  
niram Judson, the great missionary to Burmah, to  
Livingston to give his life for Africa, and the call  
to other missionaries who through the ages have  
endured sufferings unto death, that they might  
preach the gospel of the risen Christ, was not  
stronger nor more supreme than the call which  
comes to the people of America to save Christianity  
and civilization from destruction by a power or-  
ganized through atheism and barbarism.

This is the task to which every man and woman  
in this country has been called, and the people of  
this nation must recognize it in this light and conse-  
crate their all to this heroic, sublime work.

In this light we must recognize and reiterate it  
everywhere that the supreme duty of this nation is  
to fight.

## The South Must Feed the Nation and Allies

FOR THE NORTH AND WEST LOOK TO THE SOUTH FOR FOOD.

UPON the South rests the burden of sav-  
ing this country and our Allies from  
starvation.

The task is one which will call forth the  
utmost energy of the people of this section.  
The warnings which have been given to the  
South to feed itself show how little compre-  
hension the officials who have issued these  
statements have of the task before this coun-  
try and how little they understand that in-  
stead of the South being a burden upon the  
rest of the country for a supply of food, the  
South alone by its production of food can  
save the rest of the country and our Allies.

Other sections are a burden upon the South  
in this particular. Other sections are using  
and must continue to use tens of thousands  
of cars to transport foodstuffs from the South  
to the North and to the West.

Without the foodstuffs furnished by the  
South this year there would be starvation in  
the North and West and starvation in Europe.

We have repeatedly warned the Govern-  
ment that the statements put forth in regard  
to the great corn crop of last year were abso-  
lutely misleading and fictitious. We tried to  
convince Mr. Hoover and President Wilson  
last fall that the country was being danger-  
ously misled by reported record crops when  
the facts did not support the statement.

The corn yield was only a little larger than  
the crop of 1912, and the quality of much of  
that produced in the West is so inferior that  
its feeding value is much less than the crop  
of five years ago, and the whole West now  
faces the danger of a famine of corn suitable  
for seeding.

A very large proportion of the Western  
corn crop was damaged by early frosts and  
could be utilized only if consumed at once.  
This very condition made a tremendous short-  
age in the supply of seed corn. It will be a  
difficult, if not an impossible, task under these  
conditions for the West to produce as large  
a corn crop as it did last year, though the  
country needs to produce at least 1,000,000-  
000 bushels more.

**The South alone can save the situation.**  
**The West cannot.** Not only can the South  
increase its corn acreage to a great extent if  
given the co-operation of the Government and  
of the bankers, but it can get this corn into  
market a month or two earlier than Western  
corn will be available, and this month or two  
may mean a difference between success or  
failure in the war, between the feeding or the  
starvation of our country and the Allies at  
a most critical period next fall. It is impos-  
sible to exaggerate the seriousness of the  
situation.

It is incumbent upon the Government to  
urge upon the North and the West that they  
should no longer be as dependent as at pres-

ent upon food supplies from other sections.  
There are many abandoned farms in New  
England which should be put into cultivation.  
There are many in New York State which  
could be made to produce larger supplies of  
food, though at the present time New York  
uses transportation sufficient to haul into  
that State more than 40,000,000 bushels of  
wheat or its equivalent in flour to feed its  
people. California, Illinois and Indiana and  
other Western States should be urged by the  
National Government to cease to be a burden  
upon other States in the matter of foodstuffs.

The South is saving the situation. It is  
annually shipping more than \$200,000,000  
worth of vegetables, such as potatoes and cab-  
bage and onions and fruits and other things  
which are absolutely essential into the North  
and West, requiring the use of more than  
200,000 cars to haul the stuff. It also sup-  
plies \$350,000,000 worth of food and feed-  
stuffs from cottonseed. The South is also  
producing on its farms the cotton which runs  
all the mills of the entire country. It is sup-  
plying \$100,000,000 worth of peanuts, which  
are becoming of enormous food and oil value,  
and it supplies all of the cane sugar raised in  
the United States.

These things are largely shipped to other  
sections, when, according to the doctrines  
proclaimed from Washington, it is an imposi-  
tion upon the nation for any section to buy  
foodstuffs from other sections; but ignoring  
entirely the lack of wisdom displayed in much  
of the matter sent out from Washington about  
the production of foodstuffs by the South for  
its own needs, it must be borne in mind that  
the South must provide foodstuffs for the  
needs of other sections and the Allies, or else  
the day will be lost and destruction overtake  
us. We can look only to the South to save  
the North and West and our Allies.

Mr. Hoover has recently stated that the  
next two months will be the most critical in  
the food supply of the country which we have  
had since the war. This is not news. We  
were urging that upon Mr. Hoover's atten-  
tion last fall, when, misled by the over-opti-  
mistic statements of the Department of Agri-  
culture, he was declaring there would be an  
abundance of food for two years, while the  
MANUFACTURERS RECORD had been warning the  
country that we were walking straight to-  
ward the precipice of a great food famine and  
were getting desperately close to it. The  
danger of the situation is beginning to dawn  
upon the country. It should have been fully  
foreseen two years ago.

Upon the South, however, rests the supreme  
task of saving the nation.

Every bushel of corn which this section  
produces this year will be worth, not meas-  
ured by dollars and cents, but by power for

good, more than any bushel of corn ever raised in the history of the world.

Every bushel of peanuts will increase our supply of food and fats; but while we are urging and stressing the importance of raising more peanuts and more corn, more oats and more hogs, more poultry, more potatoes, more cattle and more of everything else which will furnish food to man or beast, we would also stress the importance of an enlarged production of cotton. Another short cotton crop would be an international disaster. Cotton and peanuts and soy beans are among the South's great contributions to the world's supply of fats, and the world is verging very close upon starvation for these things.

**We beg with all the power at our command that the seriousness of this situation be realized, and that the South increase its food production not from any narrow point of view of feeding itself, but from that broader point of view that the South alone can save this nation and our Allies from starvation. The rest of the country is a burden upon the South in this respect to a greater extent than the South is a burden upon any other part of the land, and the South must carry the burden. It must save the day, it must meet the responsibility which rests upon it to save the nation from starvation and to save our Allies.**

It behooves every man in the South to preach this doctrine, to urge it everywhere and to use the utmost power of the South to increase the production of corn, of peanuts and of other foodstuffs, as well as of cotton, not simply to feed ourselves, but to feed other sections of this country dependent upon the South for food and to help the Allies.

To the South alone can these look with hope for salvation through this year's crops.

#### DR. GARFIELD REVERSES SECRETARY BAKER IN COAL.

DR. GARFIELD, whatever may have been his mistakes, was not responsible for the primary breakdown of the coal mining industry, since it was Secretary Baker and not Dr. Garfield who overruled Secretary Lane's agreement with the coal operators. Dr. Garfield recognizes that the prices fixed were entirely too low in order to secure the best results and he now makes an adjustment in the case of Pennsylvania's bituminous coal by increasing the price by 60 cents a ton which the operators can charge, thus going directly contrary to Secretary Baker's action.

Commenting on this, the Philadelphia Public Ledger says:

But every little helps, and while there will be no gainsaying of necessity for Federal control over prices, the fact remains that thus far that control has been of such a character that there is little public confidence in the skill and knowledge with which it has been exercised.

Had Dr. Garfield not begun his work by claiming that the whole coal situation was merely a "psychological" one and warning the people not to buy coal until he had fixed the price, the public might have started out with more confidence in the wisdom of his operations; though when Secretary Baker denounced and broke the agreement made and commended by Secretary Lane the public rather lost confidence in Government control of coal.

#### "PROFITEERING"—AND NO END.

THIS is a blessed world of catch phrases and coined words, so easy to say in terms of little stickers and pasters. At the moment we have an oversupply of one.

At the revelation that the Hog Island shipyard will cost \$20,000,000 more than the tentative estimate made last March, up goes the chorus:

"Profiteering!"

It is nothing that the responsible parties say plans have been changed twice, that the Government was demanding all possible speed, that our Allies were in need of food and munitions and men—nothing, in short, that the house is burning. Work is to be stopped and possibly the largest single shipbuilding plant seriously thrown back in its activities, in order to inquire if there has been—

"Profiteering."

We have passed through a coal famine that has cost the country hundreds upon hundreds of millions in the production of goods that are needed both here and abroad. And at the proposal to raise the fixed price of coal to a point at which the leading coal operators state that the supply of clean, heat-producing coal can be considerably increased, instantly goes up the cry:

"Profiteering!"

There is a world-wide shortage of wheat. The expected increase in wheat production in this country has not come. The wheat growers in a body present their case at Washington and demand a higher price than that fixed by the Government—a price which they insisted alone will insure the desired supply. And again we have the familiar cry:

"Profiteering!"

There is "profiteering" in the wool supply; "profiteering" in the cantonments; "profiteering" in the supply of uniforms; "profiteering" in the supply of wood for aeroplanes; "profiteering" in the—good Lord knows what else.

Every manufacturer, every food raiser, every coal operator, every business man a "profiteer."

But this is not the end of the list. All labor, every workman, is a "profiteer." Every shipbuilder, every railroad employe, every munitions worker, every steel worker, every coal miner who asks for an increase of wages is met with the same cry of:

"Profiteer."

It is nothing that the cost of living has been boosted a hundred per cent. It is nothing that everything he has to buy costs him twice what it did two years ago. It is nothing that a Government should promise to make food dearer, and every other article as well, by further inflation, further debasement of the buying power of the dollar. There is no time to try his case. It is easier to shout:

"Profiteer."

And we regret to say that some of these epithets are hurled from high places and from the lips of representatives of the Government when the particular piece of governmental work they are supervising happens to be trod upon.

The American people are long suffering, but we have a suspicion that they will soon have had their stomach full of this cheap and nasty accusation.

We are not a nation of a hundred million "profiteers."—New York Tribune.

The Tribune has done the nation a service in this protest against the ceaseless vituperation heaped upon everybody, and by calling American people to a realization of the fact that most folks are honest and patriotic and not dishonest grafters and profiteers.

The cotton farmers, for instance, are constantly charged with being profiteers. Is the charge true, even if cotton is selling two or three times its ante-war prices?

The wheat farmer, the wool raiser, the corn grower, the livestock man, the packing-house owner, the chicken and egg raiser, the dairyman, the mechanic, the farm hand, the day laborer, the school-teacher, the preacher—are all profiteers according to the senseless, muck-raking campaign that is on. Are they indeed profiteers because the enormous increase in the price of everything adds to the cost of doing business and the cost of living?

More than anything else just now Washington needs less muck-raking activities, less suspicion-creating propaganda against farmers and manufacturers alike, and a more open and frank discussion of every economic problem based on the facts and not on visionary theories or efforts to cover up the facts.

Secretary Baker has wisely decided to stop the plan of secrecy in contracts and to throw open to the public all contracts made by the War Department. That is a good move—let everything be out in the open.

Grafters, profiteers, traitors and pro-Germans we, of course, shall have with us to some extent. All of

them should be treated alike, but don't let the American get the false idea that everybody is a grafter, a profiteer, a traitor or a pro-German.

#### THE BOLL-WEEVIL DRIVING COTTON FARMERS TO CATTLE AND HOGS.

IN a letter to the MANUFACTURERS RECORD, Mr. W. W. Croxton, general passenger agent of the Atlanta, Birmingham & Atlantic Railway, Atlanta, calls attention to a map recently issued by his road, showing the movement of the boll weevil in Alabama and Georgia, and the necessity by reason of its destructive work for the cotton growers of the South to prepare to meet this situation by a larger production of foodstuffs.

The MANUFACTURERS RECORD has repeatedly said that the South would have been better off if it had never raised a bale of cotton, for without cotton there would have come a broad diversified development of agriculture and stock raising which would have made this section infinitely richer than it is. For many years the cotton industry was a drain upon the fertility of the South and this region gave of its best life-blood of trade to the prosperity of other sections by selling cotton at a cost practically below the cost of production, all things considered.

In the course of his letter Mr. Croxton, referring to a map showing the cotton production of the territory in Alabama and Georgia covered by it before and since the invasion of this terrible pest, says:

If you will have someone analyze the production of cotton in this section, figure the value at the present price, say \$150 for a 500-pound bale, and the seed for \$35 per half-ton for each bale produced, you will be astonished at the amount of the actual loss by reason of the ravages of this pest. The modern farmer realizes the menace, but the "average" one-horse and two-horse farmers are slow to change, and so will not diversify until their "all" is extinguished by failure. Then they will have nothing left with which to begin something else. The "average" farmer thinks of the boll weevil as some good American people think of the war, something that is very far away and which does not concern them. We hit upon the map idea to try and visualize the exact situation, and to bring home to the "average" farmer exactly how the coming of the boll weevil menaces him and his future prosperity unless his farming program hereafter provides for food for himself and family, and forage for his animals.

But do not get the impression that Georgia and the South are not making progress. Five years ago, probably not one hundred cars of hogs were marketed in the packing-houses of Georgia and Alabama, which were grown in those States. Georgia expects to market one million hogs this slaughtering season and Alabama will probably market half a million. The cattle industry is also making splendid progress. Georgia and Alabama imported from Texas and Tennessee this past fall about 15,000 head of breeding cattle, largely of the beef type. We had a man in Texas two months, buying cattle for farmers along our line, and he alone shipped over 3000 head to our farmers.

While there is a note of pessimism in Mr. Croxton's intimation that the one-horse farmers, or, as he calls them, the "average" farmers, will not learn until it is too late that they cannot depend upon cotton because of the boll weevil, there is on the other side an enthusiastic note of optimism in the great increase which he reports in the number of hogs which will be slaughtered in the packing houses of Georgia and Alabama this year, reaching, according to his estimate, 1,500,000 head from these two States alone as compared with probably less than 100 carloads of hogs thus marketed five years ago.

There is also an interesting and optimistic fact in the great number of blooded breeding cattle which are being brought into these States. With the incoming of high bred stock, the scrub cattle which are in evidence in so many places can be gradually bred up until the South will become the dominating beef producing center of the country, as well as it may yet become the dominating hog-raising section. For these two interests, the South is pre-eminently adapted and the progress which Mr. Croxton reports as to Georgia and Alabama is in evidence in every part of the South.



## We Must Create and Maintain for Years a Mighty Fighting Machine.

TWO years ago the Charlotte News vigorously opposed the preparedness campaign of the MANUFACTURERS RECORD. It admits now that it was wrong and that we were right, but in discussing the subject it says:

We are almost led to the conviction that the able editor of the MANUFACTURERS RECORD admits this contention and that, seeing now less far than he seems to have seen in 1915, and witnessing no likely war after the present war, he would not favor the maintenance of such a military organization as has lately been built up. He knows that to keep such an organization in existence would be the most serious liability that the nation could inflict upon itself, liability in the sense not of what such an army costs to maintain nor in the sense of what it deducts from the usual program of our pursuits, but a liability in the sense that it would stand as a challenge to any other great power to come along at any future date and make a test of its comparative military efficiency.

The News entirely misunderstands the views of the MANUFACTURERS RECORD. We are definitely and positively in favor of the maintenance of a greater military organization than has been developed, and in favor of compulsory military training of every boy in the country when he reaches the proper age.

Suddenly all the world has become a mighty war camp, and the end is not in sight.

The News thought, two years ago, that when the European war was over, the nations of Europe would be too exhausted to fight us under any conditions, and now it thinks at the close of the present war there will be no likelihood of another war necessitating the maintenance of a great military organization by us.

There is only one possible way in which this war will not be followed by other and even more disastrous wars, and that is by such a complete subjugation of Germany, by the complete overthrow of the whole spirit of Prussian militarism, as to destroy Germany's power to create another fighting machine. That is not in sight at present. Germany is today seeking peace, provided it can get peace on its own terms and with the admission by its enemies that Germany is victorious and that they have been conquered. That is the only condition on which Germany is willing to make peace today, but even now Germany is earnestly discussing and planning for still greater wars in the future. Its public men are openly saying now that Germany must of necessity begin immediately to prepare for the next war.

There is no thought in the minds of Germany's military leaders of ever letting up until Germany has conquered the world, and now that Germany has practically conquered Russia, it is impossible for any human foresight to measure the dangers ahead of us. We shall have to fight for existence, and the sooner we recognize it the better, for if we do not promptly recognize it fully and completely, we shall be doomed to destruction ultimately, even if we escape destruction in the present war by any patched-up peace. In fact, any peace not based on an unconditional surrender by Germany would mean that we shall certainly have to fight Germany in the future, and no one can say who will be Germany's ally at that time, in view of conditions in the East and in Russia.

Instead of a great military machine standing as a challenge to the outside world as suggested by the Charlotte News, a great military machine would stand as a warning to outside nations not to undertake to challenge the power of this country.

The position of the News is exactly the same as would be the position of a man who said that the organization of a police force invited the aggression of burglars and murderers. The police force is the protecting power of the community to prevent its being overrun by burglars and murderers, and the greatest military machine which we can possibly construct during the next five or ten years will be needed just as much, if the life of this nation is to be saved, as a city needs a police force in order to save its people from ruin when crime threatens to be rampant.

The fact that Secretary of War Baker is such

a pacifist that he does not believe in compulsory military training is, under the present world-wide situation, a most serious danger to the nation. A far-seeing Secretary of War would plan for the utmost development of every ounce of the nation's strength in the creation of a fighting machine, knowing that this fighting machine will be a necessity, not only as long as this war lasts, but until the war spirit evoked by the struggles of this hour against the barbarism of Germany and the overturning of conditions in Russia has completely passed away. That time is not in sight.

**Nothing short of the infinite power of the Almighty to touch the hearts of men everywhere so completely as to make of this world a veritable heaven can save us from facing problems and dangers which demand a permanent military machine of the greatest power and efficiency which the wealth and the power of this country make possible, unless we can co-operate with the Allies to such an extent as to dictate in Berlin terms of peace which will send to the gallows or before the firing squad the men who are guilty of bringing on this fearful war, from the Kaiser and his sons to the military leaders, and all others in that country responsible for this fearful campaign of murder. Unless we can carry a victorious army into Berlin and give to the German people a realizing sense of what war means by having war at home; unless we can completely overthrow Prussian militarism and destroy the spirit which has created Germany's fighting power, then we shall need the greatest army and the greatest navy which we can produce, and we shall need them both for many years to come.**

The Countess Von Krockow, writing from an intimate acquaintanceship with the spirit which dominates Germany, has well stated the case. She says: "Whoever knows Prussianism knows that every contingency has been thought out, knows that measures for prevention of strikes have been taken, knows that the army has been trained to ready obedience and is ready at every moment in this spirit to suppress all riots and strikes."

In describing the situation in Germany and the character of Germany, she well says: "This is a situation which America must face, and until this spirit of Prussian militarism has been completely crushed and discredited, there is no hope for peace for this country or for the world." And to this she adds:

No likeness to Germany is found in any other country, for which reason no conclusion should be drawn from the success of revolt or revolution in other countries. The empire consists of numerous sovereign States, each with a ruling prince, who maintains a body-guard of soldiery besides soldier police. And all these two dozen princes are primed to the last cranny in their skulls with a resolve that their subjects shall be kept under. One is ready to lend forces to the other to suppress riots. The Government offices of each small kingdom contain rolls of names of the men and women who are Socialists, together with the names of the leaders, who are destined to be seized and imprisoned at the first outbreak of social disturbances. Nowhere will the people have weapons. The weapons are all in the hands of the military, the police and the junkers, who keep a store of ammunition and hunting guns.

At the front every officer carries the bullets he is to fire into the men under his command whom he knows to be "disaffected," and who may attempt to promulgate insubordination in the army in sympathy with that bursting out at home.

The prospect of strikes or riots being successful is hopeless. Nothing short of universal revolution will be effective. When the middle classes have seen the army crushed, the power of Prussian militarism, to which

they pawned their souls, beaten and humbled and discredited, when, in tremendous reaction, they turn from the Government and join the proletariat, then we may hope for something new in Germany. Even then the new Germany will first have to emerge from a bloody civil war.

We would, therefore, again urge the Charlotte News to recognize the fact that we have entered upon a period of world affairs which demands not merely for the time being the creation of the greatest fighting machine which it is possible for us to build, but the maintenance of that machine to the highest point of efficiency for many years to come. No one can possibly regret this situation more than we do, no one can hate war more than we do, no one can long for peace for this country and the world more than we do, and there are few to whom this war will come with a closer, keener, personal touch than the writer of this. But we face a world condition unlike anything else recorded in human history, and the sooner our nation awakes to this fact the more likely will we be able to save ourselves.

And this calls to mind a letter from a leading minister, lying on our desk as we write, who says:

"I am also arranging a special patriotic service for Sunday the 24th, at which time the names of all the men of our church represented in the service of the Government, both in the Navy and Army, will be read and special prayers made for them. Personally I am going to try to re-emphasize the duties that have fallen upon those of us who remain at home. The situation at the present seems to be very critical to me. I am sure that some of our folks have not gotten their eyes open yet, and it seems to be impossible for them to fully realize just what we are up against. I am sure that our great God will give us the victory in the end, but we must have several different kinds of victory. There must be a victory at home as well as abroad. And, too, there must be a victory in the individual life, and in the Church. So the sooner the people come to realize their full duty, the sooner this conflict will be over. I am praying that God will hasten the day."

This minister has stated the case with clearness. There must be a victory at home in the shape of an awakened sense of the magnitude of our task, of the danger to our country, of the danger to Christianity itself, of the danger to all civilization, and there must be a victory too in the individual life, when the men and the women of this country consecrate all that is in them, all that they have of time and talent and money to the service of God in saving this nation and civilization.

This fact will be driven home upon us in the near future, and then instead of rampant optimism about our ability to "lick creation," we shall have a spirit of undue pessimism. He who would save the nation from this spirit of pessimism must fight today to arouse the nation to the magnitude of the struggle and bid people steel their hearts to the sacrifice which we must make.

**The supreme duty of this country now is to fight.**

### IMPORTING SOY BEAN AND COCOANUT OIL FROM ORIENT IN TANK STEAMERS.

W. R. GRACE & CO. of New York, who recently announced through the MANUFACTURERS RECORD that they were in the market for securing tank cars for shipments to be made to San Francisco and the bringing back from San Francisco of coconut oil and soy-bean oil, have furnished us some additional information on the subject.

They advise us that the coconut oil which they propose to handle through tank-car shipments from San Francisco is brought to that point in bulk from Manila, and is carried in their storage stations in San Francisco and distributed from there.

The handling of soy-bean oil by tank steamers from Japan to San Francisco has not yet commenced owing to the lack of facilities at Japanese ports for making quick delivery of the oil in bulk, but as soon as these facilities are provided shipments of soy-bean oil in bulk will be made by Grace

& Co. to San Francisco regularly and from that point distributed to the country.

These facts as to the development of soy-bean oil importations are of especial interest to the soy-bean oil producers and manufacturers in this country. The soy-bean oil industry has for centuries been prominent in Manchuria, and from that point the beans have been shipped in large quantity to Europe for use in oil mills. It is from the East that we have learned the growing of the soy bean and the development of the soy-bean oil-making industry, but under the plan which is now being developed by Grace & Co. soy-bean oil is to be brought in tank steamers from Japan to San Francisco and handled in tank cars from that point to all portions of the country. What effect will this have upon growing soy beans and the manufacture of soy-bean oil in this country?

The coconut-oil industry has also reached a point where it is being handled from Manila in tank steamers and distributed from San Francisco in tank cars.

### MORE SHEEP AND MORE WOOL NEEDED TO SAVE SITUATION.

THE whole country is waking up to the importance of lessening the number of dogs in order to increase the number of sheep. The House of Delegates of Virginia has adopted a dog tax of \$1 on male and \$3 on female dogs, making the owners liable for damage done by their dogs to livestock and poultry. The bill is drastic in its provisions as compared with previous dog laws, as it is State-wide in its application, and requiring that all dogs shall be confined and wear license tags.

Maryland is discussing a plan for suppressing dogs in the interest of sheep and of poultry. The Maryland State Grange has sent a memorial to this effect to the General Assembly and there are reports that the Federal Government is preparing to get after stray dogs.

Louisiana and Texas and North Carolina and other States in the South are aggressively working against dogs and for sheep. Mr. T. J. Shelton of Monroe, La., who is active in this movement in Louisiana, writes:

This matter is receiving consideration at this time all over the South, and I think we should push it in the interest of the saving of food needed for human consumption and in the saving of wool. The dog kills sheep, thus destroying wool. At Friday's meeting Mr. R. L. Moore, a member of the Council, reported he had just lost 10 head of sheep killed by dogs.

At a meeting of the farmers of the Parish in which Monroe is located, the following resolution offered by Mr. Shelton was adopted and ordered to be referred to the State, parish and municipal authorities of Louisiana. The resolution was:

Whereas, there now exists a serious shortage of food-stuffs, including meats; and

Whereas, large quantities of food for human consumption are being consumed and destroyed by thousands of dogs throughout the parish and State; therefore, be it

Resolved, That it is the sense of this meeting that this is a matter of great importance, and that some definite action should be taken looking toward the control of the worthless dogs, either by taxation or by elimination.

When more than a year ago the MANUFACTURERS RECORD began this agitation for the suppression of dogs in the interest of sheep, many people ridiculed the idea, and declared the South would never give up its dogs, and that an agitation on that line was useless. It was also said that the matter was entirely too trifling to be submitted to Congress with a suggestion of a war tax on dogs, but within the last 12 months there has come a complete change in the thought of the whole South on the subject, and men everywhere are now working earnestly and intelligently in behalf of sheep raising, knowing at the same time this cannot be achieved without the destruction of the worthless curs which abound and the confinement of dogs within the limits of the yards or grounds of their owners.

The stray dog will have to be suppressed. The worthless cur should be killed off. Those who want

to keep dogs should be willing to pay a tax for them, keep them confined to their own property and be responsible for any damage done to sheep, poultry, or to human beings. For the dog kills sheep and poultry, is constantly biting men and women as well as children, and when rabid its bite causes the death of horses and other live stock, not to mention human beings.

The pet dog, the hunting dog, and the watch dog are well enough in their place, but the day has passed when they can be allowed to roam at large and when their existence can be made a reason for the existence of millions of worthless dogs which live by foraging and killing poultry and sheep. The food question is too serious. It is a great, vital, all-dominating question of the hour, and everything which lessens our ability to produce and conserve food is endangering civilization.

### OPTIMISM IN BUSINESS WILL HELP TO WIN THE WAR.

TYPICAL of the spirit with which the people of the country are more and more coming to recognize that the great task before this nation is to make war is a statement in the weekly Iron market report of the Matthew Addy Company of Cincinnati, in which, after referring to the difficulties and trials in the production and distribution of pig-iron, it is said:

We are at war. We are facing many hard and stern and terrible problems, but all these problems can be solved and will be solved. The iron trade seems to be hit pretty hard. Things are not ideal, but probably we are very fortunate that we are getting along as well as we are, and a brave optimism that will minimize difficulties make the lessons of adversity sweet and useful is the only real American attitude these days.

The same spirit is shown in a letter from one of our readers, Mr. H. M. Johnson of Gadsden, Ala., who says:

The war is bearing down on the mind of all our people so hard we cannot plan for anything other than to do our part in the feeding of our soldiers and our Allies, and before everything else win the battle for everlasting peace.

And the American Agricultural Association of Washington writes:

You have been and are doing a splendid work in assisting the Government in the prosecution of the war, and we hope you can and will continue it until the war is won. The winning of the war should be the main business of all loyal citizens now. An exposure and prosecution of spies and profiteers will be a most powerful factor in strengthening the Government and its associates for the combat.

These are typical expressions which are coming from all parts of the country, showing that at last the nation is waking up to the fact that the winning of the war is the supreme business of this country. Beside that issue all other questions sink into insignificance.

Nothing should be omitted that makes for the strengthening of the nation and its power to win the war. Nothing should be done which lessens in any way the strength and power of the country in pressing the war vigorously to the utmost limit of our abilities.

All business interests, regarded from the personal or financial point of view, should be laid aside in thought and in act wherever they would interfere with the great task of winning the war. On the other hand, no business the development of which helps to strengthen the nation, increase its prosperity and add to the ability to finance and fight this war should be left undone. If road building, for instance, would lessen the nation's strength for war, we would vigorously oppose the building of good highways, but it is because we know that the nation must have good highways that we are fighting for continued highway construction. And so it must be down the line of every business interest. The one question which every man must put to himself is, Will my work help to strengthen the nation, help to increase its prosperity, to enlarge the yield of food or lessen the waste of food, en-

large the output of coal, iron and steel and ships, or will it lessen the production of these things?

Our thoughts must be concentrated on the great issue which involves the life of the nation, and we must do all things with an eye single to this supreme task of the centuries. There must be everywhere that spirit of "brave optimism" to which the Matthew Addy Company refers; the spirit which enables us to meet the hard problems with a smile upon our lips and with grit and determination in our hearts. There must be that realization of the war to which Mr. Johnson refers in suggesting that before anything else we must concentrate our work upon winning "the battle for everlasting peace," and that thought expressed by the American Agricultural Association that "the winning of the war should be the main business of all loyal citizens now."

In this spirit of optimism, in this spirit of concentrating our thoughts upon the great problem of winning the war, we can go forward with the work of the nation, strengthening its agricultural and industrial activities, helping to create prosperity and optimism everywhere and fighting this war in a spirit of optimistic prosperity rather than in a spirit of pessimistic poverty.

To throw optimism into every business which makes for national betterment is now the task before our country.

### COLONEL WATTERSON RIGHTLY STATES THE CASE FOR HONEST, FEARLESS NEWSPAPERS.

THE Courier-Journal would not add the weight of a feather to the load of responsibility that presses daily and hourly upon him (President Wilson). If there be another in public life who could fill the bill better than he—with his pen as well as he—we do not recall him. But this is not "to go it blind." That the Courier-Journal would be unwilling to do for any man.

It is a public journal, in honor bound to speak the truth, the whole truth and nothing but the truth. It is a popular institution, and should walk upright, not crawl wormlike. It is an equal, not a vassal. Pursuing the noble functions and exacting duties which a kind of destiny assigned him, the editor of this paper was given at a very early age unusual opportunities in the reporters' galleries respectively of the House and Senate and in the journalism of the National Capitol to qualify himself through first-hand knowledge of public men, measures and methods. He was proud of his calling and from that day to this has held his head professionally high—exceeding high—since he assumed responsibilities of his own, taking orders from nobody, owing allegiance to none, but, with a keen, ever-present sense of accountability, seeking, with an humble but resolute heart, to serve God and the country.

He takes leave to say this in no vainglorious, self-exploiting spirit. But, since the cap is thrown down, he must e'en pick it up. He must pick it up for the honor of the cloth. Truly he may say to Woodrow Wilson, as he said to Grover Cleveland, "I like you very much, Mr. President, but sometimes I do not like some of your ways and make bold to tell you so."

This is the splendid closing of a lengthy reply by Col. Henry Watterson to some of the critics who assailed him because he presumed to express opinions contrary to their narrow views about some shortcomings in the War Department. It calls to mind that classic and picturesque closing, in a different vein, but equally as vigorous in its assertion of an honest newspaper's duty of criticism where needed, in a great editorial by Mr. Watterson some years ago when some popinjay had taken him to task for criticising some acts of the Democratic party, wherein he said:

"Things have come to a hell of a pass  
When a man can't wallop his own jackass."



## GENERAL GOETHALS FIRES AN "INEFFICIENT," WHICH SEEMS TO JUSTIFY SOME CRITICISMS.

MAJOR-GENERAL GOETHALS, since he was placed in charge a few weeks ago, has revolutionized the quartermaster's branch of the War Department. He has made many changes, which in the less important officials have been as radical as was his appointment, and in referring to one of these recent changes and the reason for it he stated that in an examination of the qualifications of the captain in charge it was "discovered that he lacked the efficiency considered necessary for the performance of the duty with which he was charged." Therefore, this captain was discharged from that job.

A few months ago when the MANUFACTURERS RECORD began its campaign to arouse Washington to the necessity of turning out the incompetents, the inefficients and the procrastinators, it was vigorously assailed by hidebound partisans, who said that to criticize anything in the War Department was a reflection upon President Wilson. But out of the criticisms grew the reorganization of the War Department, and now General Goethals discharges a captain because he "lacked efficiency." Possibly some of those who so criticised the MANUFACTURERS RECORD will begin to understand in the near future that inefficiency must go and that there was no chance of inefficiency being eliminated except by vigorous criticism of the inefficient.

And this calls to mind the fact that the Age-Herald of Birmingham, which was one of the bitterest assailers of those who criticised inefficiency at Washington, in one of its recent issues had the following interesting editorial:

### BRILLIANT HEADWORK IN SHIPPING PILES.

As an example of stupidity in preparing shipments of supplies for the American expeditionary force in France, Gen. William Black, chief of engineers, says, a large shipment of piling, needed for building freight piers, was ordered by General Pershing, who specified a length of 70 feet.

When the piles were ready for shipment it was discovered that the vessel in which they were to be carried could not accommodate timbers longer than 50 feet. Somebody had a brilliant thought. The piles were cut in half and transported across the Atlantic to a French port, where they were quite useless.

The little story of the piles, however, should not be taken as an indication of the way the Government is sending material abroad. If that were true, the Allies would have been defeated long ago. Yet, that any person in a position of authority should reveal a skull of such "solid ivory" passes comprehension.

In comparison with the fellow who ordered those 70-foot piles cut in half an ordinary moron would appear to be a person of superior intelligence.

Here is another case of inefficiency, inefficiency so great that the Age-Herald refers to it as a shining example of stupidity, surpassing comprehension. This was another case of inefficiency which sadly needed to be eliminated, and we trust that General Black has wisely rid himself and the War Department of the man guilty of this shining "example of stupidity."

But just how the Age-Herald and other papers which so bitterly assailed all who fought for greater efficiency in the War Department will justify themselves in the light of these facts now coming out we do not know. The MANUFACTURERS RECORD rejoices that it was able to learn the truth as to some of the weaknesses in the War Department, and that because duty to the country demanded that it state the case it vigorously fought to arouse Washington to the necessity of getting rid of incompetents and inefficients.

Since the foregoing was written the Associated Press has sent out a dispatch from Washington, under date of February 21, which says:

Reorganization of the quartermaster corps under Major-General Goethals has been completed, and a summary made public today shows radical changes designed to insure the food and clothing supply of the army, particularly of the overseas forces. General Goethals is depending very largely upon highly specialized civilians to carry out his program.

One step taken is to meet such a situation as the

recent railroad congestion, which found the embarkation service cut off from its usual food supplies, for the storehouses have been established at the ports of departure, where vast quantities of foodstuffs are kept constantly in stock.

The fuel and forage division, to which is assigned the duty of aiding army contractors in procuring fuel to keep going, is headed by Daniel B. Wentz, for years an extensive coal operator. He has surrounded himself with civilian experts on fuel, forage and oil, which he purchases for the army.

Still another new element of organization is the outfitting of troops bound overseas at special camps maintained for that purpose. Heretofore they were outfitted at their training camps. Camp Merritt, near New York city, now is used for this purpose, and arrangements are being made for similar use of Camp Stuart, Va.; Camp Dix, N. J., and either Camp Meade, Md., or Camp Lee, Va. Great quantities of supplies of all kinds for outfitting purposes are being concentrated at these camps.

The basis of the reorganization was a planning staff created by General Goethals soon after he took office, and of which Dr. F. A. Cleveland, head of the efficiency commission during the Taft administration; Dr. H. M. Hopkins, president of Dartmouth College, and a specialist on labor matters, and Dr. A. A. Hamerschlag, director of industrial research for the Carnegie Institute, are members, with A. E. Pfeiffer and G. F. Willet in charge of the industrial relations.

Robert J. Thorne of Chicago, formerly head of a big mail-order house, has been appointed general merchandising manager of the corps. He determines what shall be bought and how much and where it shall be handled.

Well, well! and so General Goethals is supplanting inefficiency by efficiency and thus proving that he and President Wilson have fully appreciated the need of doing exactly what was urged by those who criticised inefficiency in the War Department. But what a sad blow to the tooters and howlers who fairly tore their hair out in denouncing those who first pointed out the need of these changes! They will be madder now than ever to see that they were slandering those whose advice President Wilson and General Goethals have so closely followed, for the slanderer always tries to make up by abuse for his own blunders.

## BRITISH GOVERNMENT PRINTS AND DISTRIBUTES 5,000,000 COPIES OF HILLIS LECTURE.

THE British Government, a few weeks ago, ordered printed for general distribution 5,000,000 copies of Dr. Newell Dwight Hillis' lecture on Germany's war plans and her atrocities in France and Belgium.

Great Britain's tribute to the marvelous power of this address is such an indorsement of its tremendous value that every man, woman and child in America who can possibly do so should hear it.

The MANUFACTURERS RECORD, whose patriotism has made it one of the conspicuous beacon lights in America during the war, has printed 1,000,000 copies which have been circulated in this country.

Hillis saw with his own eyes the scenes of which he speaks. He tells the truth, the whole truth, and spares nothing.

Dr. Hillis will appear at the auditorium on the evening of March 11, under the auspices of the Rotary Club.—Huntington (W. Va.) Herald-Dispatch.

We regret that we have not yet been able to print 1,000,000 copies of Dr. Hillis' lecture as stated by the Herald-Dispatch. If American people had ordered copies of this speech in proportion to its value, we would not only have had to print 1,000,000 copies, but even more than the British Government has on its own volition printed.

We would strongly urge leading communities of the South to endeavor to bring Dr. Hillis through this section. He has been eager to come, but the demand from the West and the East has been so great that as yet he has not found a chance to get into the South. It ought to be made financially possible for Dr. Hillis to devote his entire time for the whole year to this great work in which he is engaged.

## THE FIGHTING BLOOD OF THE NATION NEEDS TO BE QUICKENED INTO LIFE.

THE greatest tragedy of the war, surpassing in its potentialities for evil anything else which has yet happened, is the practical domination of Russia by Germany. It vastly increases our war task and makes certain a long and fearful contest.

In May of last year the editors of a large number of leading business papers throughout the country were invited to Washington to listen to some 14 or 15 addresses by members of the Cabinet and of the Council of Defense, and by Mr. Vanderlip and two or three railroad men of prominence. The dominant thought as expressed by these men that day was that at best the war would be a long and desperate one and that if Russia should drop out it would mean a struggle of three to five years and would call for the utmost power of this nation.

At that time no one seemed for a moment to contemplate the position of Russia, that of being practically taken over by Germany and possibly its vast resources in men and materials becoming a dominant factor in Germany's power of offense. This situation, however, is what we now face. Instead of discouraging us it should quicken every thought of the nation for a greater and more aggressive and determined warfare, for only in this way can we be saved.

Commenting on this situation, the Wall Street Journal says:

The deed has been so completely accomplished that even the President, in his address to Congress, seemed to recognize German dominance in Russia as a completed fact. It will be noticed that he did not repeat his 14 propositions of the past. What power is there that can dynamite Germany out of the complete control of European Russia, with all that such a dominance implies? Certainly nothing but an effective military occupation of German industrial territory in the West. Failing this, Germany will have reduced nearly one-half of Europe to an economic slavery to the Fatherland, with prospective profits which may pay her a return for all she has spent upon the war.

A compromise on these terms is a guarantee of future wars on a scale so colossal as to baffle the imagination. Peace talk at this time is like tying the hands of the policeman and giving the gunman full sway.

The same thought has recently been expressed in an address in Boston by Rev. Dr. Hugh H. Birkhead of Baltimore, a distinguished minister who went abroad to make a personal study of conditions there. In discussing the necessity of aggressive, vigorous, determined fighting to carry our flag and the flags of the Allies direct into Berlin, as in that way only can the situation be saved, Dr. Birkhead said:

Germany has what she wants. She controls a belt of land which cuts Europe in half, has reduced Austria to a secondary power and made herself essential to the dominant party in Turkey. Look at your map. This belt does not only cut Europe in half. It does something vastly more important. It segregates Russia. Make peace tomorrow, and give Germany five years, and she will divide and reorganize the great Russian nation, lying ready to be reconstructed by a national will from without. Russia, officered by Germany, would be the greatest military power the world has ever seen, stretching from sea to sea, and the other nationalities of the world would have to bow their knees before her. Germany has been victorious up to this moment. She has lost nothing but blood. Trenches are dug in the soil of the enemy. There is only one victory for American arms, and that is to crush the military prestige of Germany, now at its height, that Russia will turn from her in dismay, and Austria and Turkey will repudiate her friendship.

Even the German people will realize at last that their divine Government has led them down the road of ruin, and made them the horror of the civilized world. This can only be brought to pass when they see the enemy at the gate, and their houses burning down. The goal of the Stars and Stripes is Berlin.

When Dr. Birkhead made this address, however, the situation as to Germany having practically captured Russia was not as clear as it seems today. He suggested that Russia officered and controlled by Germany would become the greatest military power the world has ever seen, but Russia is only a part of that mighty territory which now substantially stretches from Belgium to the Pacific Coast which is practically, we fear, under the control of Germany. It may possibly come to pass that Russia

will come to its senses and struggle back to fight for existence, but today the chances seem entirely against it. Russia is overrun with German spies and German military men. The power of the nation to fight against Germany seems to have been lost and if this proves to be the case we may rest assured that Germany, playing one element of Russian life against another, will in the not distant future so completely dominate Russia as to control its position for the production of foodstuffs and the creation of mighty armies to an extent beyond the power of American people to grasp.

And yet in the light of these facts which Cabinet officers and others in Washington have fully understood and which they freely discussed before 100 or more editors last May, many American papers are vigorously assailing Mr. Charles Edward Russell, a member of the Root Commission to Russia because he is warning the nation of the terrific dangers ahead of us. The Lynchburg News, for instance, heads a vigorous criticism of Mr. Russell's statement as "Old Wives' Tales and the Truth." The Morning Star of Wilmington heads its criticism "His Expression Unfortunate." And the Star says that the matter has been called to the attention of Governor Bickett of North Carolina with a suggestion that the Committee on Public Information take suitable action "to prevent a recurrence of public men making speeches calculated to depress, or to give aid or comfort to the enemy, however wholly unintentional the statements may be made."

In these two criticisms the News and the Star display a lamentable lack of appreciation of the situation which we face. They are unwilling to know the truth, and the truth alone can make us free, or else they have no realization of the fact that until the American people fully understand that this is really a life and death struggle—life and death to the nation and life and death to the men, women and children of the nation—will the fighting blood of the country be fully aroused, and until the fighting blood of the nation has been quickened to the utmost limit of its power, we shall live in infinitely greater danger than this nation has ever faced since the beginning of the Revolution unto this hour. All the tasks, all the problems, all of the wars of the past which we have had to meet were but as child's play compared with the present, and he who will not recognize this fact, or who does not realize that this fact must be known to the entire nation, fails to grasp the meaning of this hour.

#### SECRETARY BAKER SHOULD PRAY TO BE DELIVERED FROM SOME OF HIS ADVOCATES.

**VIERECK'S WEEKLY**, published by the man who did his utmost through the notorious "Fatherland" to uphold Germany, but who is now claiming to be an American, is enthusiastic in its commendation of Secretary Baker and refers to him as "emerging triumphant" from the Senatorial investigation. The character of Viereck's Weekly is indicated by the work of its editor since the beginning of the European war.

The issue in which it commends Secretary Baker is to a considerable extent devoted to the Bolshevik interests, carrying on its cover-page in big type the wording:

"The Day of the Bolsheviks."

The only full page of advertising which that issue had is one devoted to publications in the interest of Germany. Among the books advertised on that page are "Blessings of the War," "Germany in War Time," "Germany's Power of Resistance," "Germany Under Three Emperors," "What Germany Wants," "The Bolshevik and World Peace," "Frederick the Great" and "H. von Moltke." One of the books thus advertised entitled, "Germany in War Time," is said to give "a panorama of a nation in arms," in telling how the civil population is living, "with a dramatic brevity that impresses the reader with the tremendous vitality and patient endurance of the German people as a whole."

Secretary Baker should pray to be delivered from

commendation by publications of such a character as Viereck's Weekly. Surely whatever he may or may not have accomplished, he deserves a better fate than to be commended by such a publication, for no greater insult could be offered to Secretary Baker or to any other honest American than commendation by such a publication or from such a man as its editor. A commendation from such a source "smells unto High Heaven," and Secretary Baker has never deserved to be endorsed by such people. The worst enemy which he might ever have had could never have wished him so unkind a fate as to be commended by such a publication.

But it is unfortunate for this nation that "pro-German interests everywhere would gladly see the utmost inefficiency in the War Department. Fortunately, however, President Wilson, by reason of the criticisms of inefficiency which were made, has already revolutionized the War Department and has brought about changes in direct line with the urgent advice of those who for months regarded with the gravest concern the inefficiency and red tape which were in many cases so pronounced.

#### COTTON CROP CAN BE INCREASED ON REDUCED ACREAGE BY SEED SELECTION AND FERTILIZATION, AND SEED SHOULD BE BOUGHT ON ANALYSIS OF CONTENTS.

**T**HE Cotton Seed Crushers of the South are making a vigorous effort for the development of a higher grade of cotton seed, recognizing that through the selection of seed, crops can be increased to a great extent with great benefit to the individual grower and to the country.

Seed selection is vitally necessary to successful agriculture, but the average farmer has never given proper attention to seed selection. Until this is done, agriculture can never reach its highest attainments. The selection of cotton seed, for instance, has never received adequate recognition, although the best growers fully understand the importance of good seed, but now that the cotton seed oil mill people are becoming aroused to the subject, they can be a great factor in bettering the selection of seed by basing the purchase of seed on the oil contents, which should be the universal standard. In olden times coal consumers bought coal by the ton, without regard to the heating value; now intelligent manufacturers purchase their coal based on heat units, or at least they did so until this system was practically destroyed for the time being by the regulations of the Fuel Administration. It was formerly customary to sell pig iron by its looks, or as the saying in the trade was, based on fracture, but pig iron is now sold by chemical analysis, and intelligent buyers purchase iron based on chemical analysis. Two samples of cotton seed may look exactly alike, but one may be very much more valuable than the other.

The Georgia State College of Agriculture has been making a careful analysis of the oil contents of cotton seed as influenced by variety and selection of seed. In a bulletin recently published it is shown that one variety of seed carried 23.80 per cent. of oil, which was the maximum, ranging all the way down from that to 17.64 per cent., the minimum, out of 48 varieties of seed thus tested. Against a maximum of production of 63.5 gallons of oil per ton of seed, the minimum was 47 gallons, a difference of 16½ gallons of oil per ton of seed. In reviewing these figures the bulletin of the college says that if seed purchases were based on quality at present prices the cotton farmers growing the seed which produces the least amount of oil per ton, would have to sell for \$21.66 per ton less than those who grow the seed producing the maximum yield.

Writing on this subject to the MANUFACTURERS RECORD, Mr. W. M. Hutchinson, president of the Cotton Seed Crushers' Association of Georgia, says:

I am particularly impressed with your splendid efforts with reference to the industrial development of the South, hence, I am constrained to call your attention to a matter which, I think, is most important. It is this:

The propaganda that the South should reduce cotton production and increase the acreage to strictly food crops, is, I think, a matter that should command the most serious consideration. Cotton produces through its fiber the cheapest clothing on the market. In the seed, a cheap and wholesome fat occurs (oil), and the cheapest animal feed, considering its high quality on the market, cottonseed meal and cake. Linters from the seed are absolutely necessary in the production of munitions; hence, I say any advocacy of the reduction of the cotton production should be seriously considered.

However, it is possible to reduce the acreage to cotton, thereby increasing the acreage to other food crops, without decreasing the production.

First, through judicious selection of planting seed. It is a well-known fact, established by scientific research, that certain varieties of cottonseed produce less lint, and from 10 to 12 gallons less oil, and from 50 to 100 pounds less meal and cake per ton, than other varieties.

A great deal of this inferior seed is being planted. With crude cottonseed oil selling around \$1.30 per gallon, and cottonseed meal around \$30 per ton (very low prices when compared with other commodities with which they compete), and lint at 30 cents per pound, a great economic loss in planting inferior seed is apparent.

Again, through liberal fertilization the acreage to cotton can be reduced, which, together with the selection of planting seed, as indicated, should yield a normal crop.

I am impressed, therefore, that the industrial papers, by giving broad publicity to this situation, can render a great economic service.

The Cotton Crushers' Association of Georgia has a special committee on the selection of planting seed, and has provided that committee with some funds to locate and distribute the best varieties of cottonseed at cost. I beg to hand you, herewith, copy of report from chairman of that committee, Mr. H. C. Brown of Augusta, Ga., which will give you some idea of the purpose of the committee. I trust you will give publicity to this report, because, as you know, the time has arrived when the farmers are making preparation for the next crop.

In Mr. Brown's circular to cotton oil people which urged the study of the meaning of these tests with a view to inducing the farmers to buy seed which produces the largest results for the good of the farmers and for the country in the way of larger oil content, he suggests that the mills should go a step further and buy some of the high grade seed and resell it at cost to the farmers, and with this we fully agree. Mr. Brown also in his advice to the mills says that he hopes the oil mills will refuse to sell for planting purposes the ordinary mill run of seed, and adds:

We all know that at planting time people go to oil mills and tell them that they are short of seed for planting, and want to buy some, and the oil-mill manager tells them to go into the seedhouse and get what they want. This is the surest way I know to repeat poor crops, and when I say crops, I refer not only to the yield of lint cotton, but to the yield of oil and nitrogen.

This matter has passed beyond the experimental stage. Seed giving high seed cotton yields, in combination with high yields of oil and nitrogen, have been located. The Georgia State College of Agriculture has shown us how we can raise the oil yield per ton of seed in the State of Georgia. It is our own fault if we don't raise it. By raising it, it means more money in the pockets of the farmers, and it means more money for the oil mills.

I think there should be a quoted basis price on what might be called average seed, and any seed better than this should bring a premium. Any seed under this average should be settled for at a discount. The plan is entirely practical as applies to carseed, and it is up to the mills to work it out.

This is one of the most hopeful movements in the cotton and cotton seed oil industry for the country, and for the South, if the oil mills, which are the great handlers of seed, will concentrate their efforts upon the selection of the highest grade seed and refuse to sell the planters any medium or inferior grade seed for planting purposes. With the co-operation of the agricultural colleges, of bankers who will help to finance the farmers, of the oil mill people and of the more intelligent farmers, there can be developed a system of seed selection which will add millions of dollars to the annual income and profit of this crop.

God grants liberty only to those who love it and are always ready to guard and defend it.—Daniel Webster.



## GREATEST EVENT IN SOUTH'S INDUSTRIAL HISTORY.

THE decision of the War Department to begin immediately the construction of a great dam at Muscle Shoals to fully develop that power, far and away the greatest in the South, will mark the greatest single event in the industrial history of the South, far surpassing in value to the whole nation the vast operations of the United States Steel Corporation at Birmingham and at Mobile.

While the construction work on this dam and ultimately on the great air nitrate plant, which is now being pushed with the utmost power of men and money by some of the ablest men in civil life working for the Government, will probably represent an outlay of \$50,000,000 to \$75,000,000, this stupendous sum in itself will not be the biggest factor of importance. The construction of this dam will open the Tennessee River to navigation, in itself a move of far-reaching importance, and will develop more hydro-electric power than the total thus far developed at Niagara, with even greater potentialities for the future by storage reservoirs.

This will mean over half a million hydro-electric horse-power to be made available by the plans now to be carried out, and naturally this will center at that point vast electro-chemical industries, upon the development of which rests all our metallurgical activities.

Moreover, the building of this dam and the plant for making nitrate from the atmosphere will, when the war demands for nitrates has lessened, make it possible to produce an almost limitless supply of cheap fertilizers, which will be of incalculable value to the food-producing necessities of the nation.

Far and away the most important piece of work for war and for peace yet undertaken by the War Department is this plan for creating over half a million hydro-electric power at Muscle Shoals for producing great supplies of nitrates, making feasible enormous hydro-chemical industries, and at the same time opening the Tennessee River to navigation. Year by year the supreme importance of this work to the whole nation will be more and more recognized. It is a great piece of work.

Our only regret is that priceless time was wasted, months and months frittered away, after Congress had appropriated the money.

## A PRO-GERMAN ARMY OFFICER JUSTLY PUNISHED.

WE do not pretend to claim that it was cause and effect, but in December last we published a statement to the effect that there were a number of pro-German army officers then in the War Department at Washington, and the call was made upon the Government to hunt out these pro-German officers and punish them.

In last week's issue attention was called to the fact that General Pershing had sent back to this country an army officer because of his pro-German views, and we insisted that such men should not merely be sent back in disgrace, but that they should be punished to the utmost extent of our laws, and said "any man in our army, whether private or officer, who is pro-German, should be forever disgraced by the severest punishment."

Monday's daily papers announced that Captain David A. Henkes of the United States Army, on account not only of his pro-German views, but on account of his vigorous pro-German activities, which were discovered by searching his papers, was court-martialed, found guilty and condemned to confinement at hard labor for twenty-five years. It was discovered that this pro-German captain had been in active communication with Bernstorff while he was the German Ambassador and had contributed

to German, Austrian and Turkish funds, and had been active in his propaganda work in behalf of Germany, and yet this man remained as a captain in the United States Army and had sworn to defend and uphold the Constitution of this country!

His conviction and punishment are directly in line with what the MANUFACTURERS RECORD has been urging since last December, and we beg to suggest that every possible effort be made to hunt out any other men in the army or navy who may be pro-German or anti-ally in their views.

Possibly some of those who have criticised us for the vigor of our utterances in calling for the weeding out of incompetents in Washington and the removal of the disloyal in the army and in the Agricultural Department and elsewhere may now recognize the justness of our attitude. Our charges never have been lightly made. The MANUFACTURERS RECORD knew what it was saying in demanding investigation of the inefficient and procrastinators and pro-Germans.

President Wilson himself has fully demonstrated that he saw the need of making changes and of eliminating the inefficient and the procrastinators. May the good work go on until every incompetent man and every pro-German in Government employ, in civil life or in the army, is hunted down and placed where he cannot do any harm!

## ELECTROCHEMICAL SOCIETY'S VISIT OF SUPREME IMPORTANCE TO THE SOUTH AND THE NATION.

THE decision of the American Electrochemical Society to hold its spring meeting in the Appalachian South, as announced in this issue, presents an opportunity of supreme importance to this section of the South to show the electrochemical and electrometallurgical experts of the nation the extensive and varied raw materials and water-power resources which the Appalachian South offers for a logical location for these important industries.

Through the development of electrochemical plants around Niagara Falls this country has held a world supremacy in these industries, but this dominant position is being vitally threatened by the lack of sufficient additional water power to provide for their expansion, and unless some other suitable location is found for them in the United States, they will be compelled to go to Canada and even to Norway and Sweden to utilize the large, cheap water-powers of those countries. Such a condition would be a calamity, because these industries occupy a place in our industrial life that is absolutely essential, and this nation should be absolutely independent of any other country for the supply of the products made through these processes.

Largely through the exhibits of the Southern railroads at the last National Exposition of Chemical Industries in New York City, the thoughts of those members of the society attending the exposition were fortunately turned to a consideration of the Appalachian South as a section that could supply electrochemical and electrometallurgical industries with an abundance of water-power, and raw materials as well, for extensive future expansion.

In order to see these resources at first hand and gauge their suitability for these industries, these experts are now coming to the South. Not in many years has such an opportunity presented itself to the South—an opportunity fraught with supreme possibilities not only for the development of present latent Southern resources that will materially add to its wealth, but in a larger sense for the supplying of these industries with a location in America where they can expand and develop, and permit this country to continue to maintain its supremacy in these vital industries.

Electrochemical industries are too important to the industrial welfare of this country to allow them to go elsewhere, because they are what may be termed "key" industries, making products that are absolutely essential to and enter into every branch of many of our most important manufacturing lines.

Up to the present time comparatively little has

been done in the development of electrochemical industries in the South; but the field is limitless. In the section to be visited by the society are great water power possibilities, and these are surrounded by a wide range of raw materials, while transportation facilities are available to reach out into every part of the country. Moreover, it occupies a protected inland location where there is the least possible chance for disturbance in case of invasion.

The meetings of the Society will be in the nature of a tour, and as at present planned will be held in Kingsport, Tennessee, April 29; Knoxville, April 30; Chattanooga, May 1; Muscle Shoals, May 2, and Birmingham, May 3. Between now and that time every section to be visited should secure complete information and data regarding water-powers, raw materials and manufacturing advantages, and bring these together in the best possible shape to show convincingly and conclusively that the Appalachian South is pre-eminently the place where they should look for the future location and expansion of electrochemical industries in America.

## THE VASTNESS OF THE HOG ISLAND SHIPBUILDING SCHEME.

WHAT Hog Island's shipyard project looks like and the progress made in preparation for shipbuilding along a two-mile river front which four months ago was practically a swamp is given in a summary herewith of an article in the New York Times.

Whether there has been profiteering and graft in the building of the Hog Island shipyard will not be known until fully investigated by the Government, but on general principles we would be very much inclined to believe that, considering the magnitude of the work, the tremendous task of taking a swamp and within a few months, despite the fearful winter, put 20,000 men to work and protect their health and create railroads and shipbuilding facilities, is a task which ultimately will receive the unstinted praise of the country. If in this vast undertaking there has been graft or inefficiency, it will come out, but in the meantime the following facts, condensed from the New York Times, will be of interest as showing the magnitude of the work already done:

Hog Island is a 700-acre tract of marsh land south of League Island, between Philadelphia and Chester, with a two-mile frontage on the Delaware River. It is almost entirely a swampy formation, covered with grass and scrub bushes.

When the American International Shipbuilding Corporation got the contract and began to prepare for work four months ago there was no adequate high road to Philadelphia, and the single track of the Pennsylvania Railroad has since been completed and double-tracked. There have been 50 miles of railroad constructed within the reservation and more to be built. The many miles of roadways traversing the site in all directions had to be built of wood, for no motor truck could get through the mud.

A photograph, dated October last, shows the work of the first buildings, the barracks and administration buildings, but not much clearing of the land or noticeable preparation for the miles of roadways and rail lines and other primary development work which had to be undertaken before the shipways themselves could be laid and ship construction could begin. The place is now a veritable beehive. About 20,000 men are employed, 5000 of whom are now living on the premises, the others being taken in and out of Philadelphia daily by the trainload. When construction work is completed it is expected 35,000 men will be employed. With all the men employed, there has not been any serious illness or epidemics of any sort through the hard winter, and the health record is better than that of the army cantonments. Money was not spared in the matter of the men's health, care and welfare.

Testimony was given before the Senate committee that the Goethals-Denman controversy last summer held up the contract with the corporation from July to September, causing great delay in the preliminary construction work by running it into the winter months of an unprecedentedly severe season.

Dwight P. Robinson, president of the corporation, in telling of some of the outside delays to the work, said: "We have more space ready now than we have steel to fill."

D. R. Kennedy, manager of the Industrial Relations Department, said that their one cry is, "Give us steel, steel, steel! We are at the mercy of the steel fabricators and the railroads." Notwithstanding these seemingly needless delays, and the fact that the corporation had to begin at the beginning and build practically the very foundations for its site, the thing to be noticed now is that the very hardest and slowest part of the construction work has been finished.

There has been an enormous amount of construction work. Naturally, the greatest part of the work toward shipbuilding itself does not show. Even the piping for furnishing compressed air to operate the pneumatic riveters, with the second largest compressed-air plant in the world, is not striking in appearance because of the magnitude of the other work. A tremendous amount of work has gone into the piling under the ways, the laying of tracks, the treatment of the ground, and preparation for roads to come after the emergency board roads were built.

The one keel that has been laid is not imposing. The second shipway is ready for its keel, and the third and fourth. On and on into the distance rise derricks and towers and cranes. It will be summer before the 50 ways are ready for shipbuilding all along the line to begin. The dredges are still working on the "wet basin," where the ships are to be completed after they are launched.

Before any of the foregoing could be started highways and motor roads had to be laid out and constructed, railways built into and throughout the property, and water supply and sewerage systems laid out which, when completed, will be the size of those of the city of Minneapolis; barracks for housing workmen, storehouses, hospital buildings, mess halls, and kitchens for feeding 20,000 men erected. Up to the present 62 barracks have been finished and about 100 more are projected. Great warehouses have been built, with others under construction; one finished building, almost all of glass, where the ship templates are made, and the sites for other similar buildings; a brick structure, known as the "bank," and many other buildings for various purposes. There is the noise of steel work, the shifting of engines; everywhere are lights and reflectors for work at night, and night inspection, for the whole reservation is rigidly patrolled and guarded.

These are some of the answers to the wide-spread criticism of the corporation's conduct of the Hog Island work. People at the yard admitted that not all the labor was being constantly used. For instance, you've got to have enough men to unload a certain number of cars; perhaps the cars don't come when they were expected; the men stand around doing nothing for a while; things like that often happen; you can't turn the men off. The various departments had perhaps not "got together" enough, and emergency efforts at speed had sometimes produced not only expense, but confusion and actual delay. But it is said work that was done at the highest possible time pressure was done expensively; the mere fact that, in order to get at shipbuilding as soon as possible, a great many different processes were undertaken at once caused extra outlay, overlapping, duplication of work; expense was not being spared in hospitals, fire apparatus, in drainage and water plants, or similar phases of the life of the yard, and, it was added, four months ago the place had been a mudhole.

#### WHICH DO YOU FAVOR, WORTHLESS CURS OR STARVING PEOPLE?

IF some magazine writer from New England were to come to North Carolina and write back home that one of our peculiarities is to think more of the cur dog than we do of a merino sheep, it would make us mad as old Tucker. However, we are afraid that's going to be done some of these days, but what we are mostly afraid of is that he will cartoon us and our dogs on trial for being largely responsible for the wool and mutton shortage in America.—Wilmington Star.

It is not merely that North Carolina and many other States, judged by their works, "think more

of a cur dog than of a sheep," but they think more of worthless, mangy, egg-sucking, sheep-killing dogs than of starving women and children, dying for lack of meat, and of our soldiers who must suffer—sometimes die—for lack of woolen clothes.

No "New England magazine writer" can ever make the picture strong enough unless he can burn it as with a red hot iron into the souls of those who fail to fight for sheep as against worthless dogs.

#### BROADEST POSSIBLE HIGHWAY DEVELOPMENT A VITAL NEED IN NATION'S WAR PLANS.

THE highways of the nation bear a close bond of direct relationship to every phase of the agricultural, industrial and commercial life of the country. As aptly stated by Raymond Beck of the Highways Transport Committee in last week's issue of the MANUFACTURERS RECORD the highways are the veins of our transportation system just as the railroads are classed as the arteries. As in the human body the arteries are of no value unless they operate co-ordinately with the veins, one being as necessary to human life as the other, so in the transportation life of the country, the highway veins are as essential to the healthiest development of a co-ordinated transportation system as are the railroad arteries. Disturb the broadest possible development of either and the whole transportation structure will fail to meet the needs of the country. In fact, so closely is the question of highway improvement related to our business and economic life that this question is one that must command the earnest thought and consideration of all Governmental departments and business organizations in order that a plan and policy of co-ordinating every means of transportation can be determined upon so that all of them will give the fullest measure of service during the war period.

So important is this question that the editor of the MANUFACTURERS RECORD recently wrote to President R. G. Rhett of the Chamber of Commerce of the United States suggesting that in preparing the program for the next meeting of this organization it would be desirable to include in this program a broad discussion of the great need of highways as a war necessity. This letter to President Rhett said in part:

The utmost possible power of the nation to produce and distribute food is necessary to save this country and the Allies from starvation. Railroad transportation has broken down, and therefore the distribution of food-stuffs is a difficult matter.

Without good roads farmers will be hampered in all of their operations, and the tendency of population away from the country to industrial centers will grow steadily larger unless this can be prevented by the better transportation facilities which good roads provide to the farming community. It seems to me one of the greatest problems before the country today is to save the farming life of the nation by making the comforts and conveniences of farm life to some extent commensurate with the comforts and conveniences of city life. In no other way will it be possible to maintain an adequate farming population. It is, therefore, necessary that the nation should recognize that the building of good roads is fundamentally a war necessity in order to make sure of an increased food supply and a cheaper distribution than we now have.

This, however, is only one side of the good-roads issue. In the breakdown of railroad transportation, the necessity for water and highway transportation is daily commanding increased attention. As you know, there are now established lines of motor trucks running on regular schedules between New York, Boston, Philadelphia and other points, and two days ago I picked up one of the daily papers from Baltimore and found an advertisement of a motor truck transportation company which agrees to deliver in Washington, Philadelphia and a number of other places throughout neighboring States, within one day after the receipt of merchandise, all freight delivered at its warehouse. This motor-truck system will, therefore, give much quicker service than is possible by railroads, and it lessens the pressure upon the railroads.

But motor truck transportation is not feasible except where good roads exist.

In view of all of these facts and many others, it has seemed to me that you could not do a better piece of work at the next meeting of the Chamber of Commerce than to have the good-roads question adequately handled from these points of view.

In the efforts of the Food Administration to stimulate the greatest possible production of food, one of

the most important influences in bringing about this production will be that of suitable highways to carry the crops to the railway station and to market. Without adequate means for a ready hauling of these crops to the railway lines, there is bound to be a serious interference with the achievement of the fullest possible results in food production.

This point was very strikingly emphasized in the telegram sent by Herbert Hoover, the head of the Food Administration, to the Good Roads Association of Wisconsin, in which Mr. Hoover said:

Speeding up construction on good roads is an integral part of Government war work. Efficient transportation is necessary to reduce margin between producer and consumer.

Thus, in a few words, does Mr. Hoover strike at the very heart of the situation, because without adequate highways to facilitate the economic hauling of farm products from the producer to the consumer we cannot expect to accomplish the fullest measure of results. This shows the intimate and very close relationship of good roads toward greater food production and, therefore, makes the improvement of such roads an essential and indeed a vital part of the war plans of the nation.

Turning from food production into the work of the Quartermaster's Department of the Army, there is found an equally keen appreciation by Major-General Goethals of the part which improved roads occupies in his work, for in the MANUFACTURERS RECORD of January 31 he said:

War conditions materially affect railroad congestion with an increasing demand for motor-truck transportation, and the necessity of properly constructed roads becomes a matter of prime importance.

Every day there are coming from the great motor truck manufacturing sections of the West continuous streams of motor truck fleets loaded with supplies and all traveling to the seaboard for transportation to France. Altogether it is planned to deliver 30,000 trucks over-land in this way. This alone relieves 15,000 freight cars for other work.

This single incident indicates only a small part of the services the highways are rendering the Quartermaster's Department, but in an equally important sense the highways leading to every cantonment, supply depot and terminal shipping point all bear strong evidence of the essential need of good roads in the war period.

Here, then, we have two governmental departments dealing with those matters that may be considered of the greatest vital importance in our war plans testifying that highways have a direct and important influence in the work before them.

The Chamber of Commerce of the United States at its meeting in Atlantic City last summer adopted resolutions stating:

That the prompt improvement of our public highways is important and should be forwarded in every proper way.

In writing about this question in the January 31 issue of the MANUFACTURERS RECORD, President Rhett says:

"It is hardly necessary to say that I am personally in accord with every line and every word of that resolution," and added, "that while it is inevitable that the creation of a system of improved highways all over the country is going to be effected, the need for its immediate establishment is pressing."

This resolution and comments of President Rhett voice the attitude of the leading business men of America on the question of highway improvement during the war. In all of this advocacy the demand is not for indiscriminate road construction, but, as stated by the American Association of State Highway Officials in the resolutions they adopted, it is for the building and maintenance of those roads which from careful analysis are shown to be needed for some phase of the country's war plans.

We cannot, however, lose sight of the fact that the improvement of a road that will stimulate greater food production is just as essential from a military standpoint as the improvement of a road leading to a military cantonment, and in the discussion of what roads are essential to the country's war plans it is necessary that all of these questions be taken into serious consideration. There can be no



question but that the assignment of cars for the construction of recommended highway work in each of the States will make possible the building of highways over which can be transported a volume of traffic in a short period that will release many times over the number of cars that were necessary to bring in the road materials.

No student of transportation can analyze the situation as it exists today in this country without appreciating that the most efficient co-ordination of our transportation systems involves the fullest possible use of the highways of the country. It will, however, be impossible for highway maintenance and construction to be properly planned until the Government announces a definite policy that will permit the highway departments of each State to arrange their work accordingly and with the knowledge that it can be carried out unless some extraordinary condition arises to interfere.

### HISTORY REPEATING ITSELF.

THE MANUFACTURERS RECORD is glad to have the opportunity of reminding its readers through the following that Germany's barbarism today is merely the outcome of its former barbarism and that we must make no mistake in understanding the character of our enemy. On this point the Wall Street Journal has the following:

Reading the following extract, is there a single line or word which is untrue of the German theory of invasion?

"One-third of France has been given up to fire and sword. For 300 or 400 miles vast armies have poured on. Every village they have passed through has been the victim of what is only organized pillage. Every city has been practically sacked, ransacked on system; its citizens plundered, its civil officials terrorized, imprisoned, outraged or killed. The civil population has been, contrary to the usage of modern warfare, forced to serve the invading armies, brutally put to death, reduced to wholesale starvation and desolation. Vast tracts of the richest and most industrious districts of Europe have been deliberately stripped and plunged into famine, solely in order that the invaders might make war cheaply. Irregular troops, contrary to all the practices of war, have been systematically murdered, and civil populations indiscriminately massacred, solely to spread terror. A regular system of ingenious terrorism has been directed against civilians, as horrible as anything in the history of civil or religious wars. Large and populous cities have been, not once, but twenty, thirty, forty times, bombarded and burnt, and the women and children in them wantonly slaughtered, with the sole object of inflicting suffering. All this has been done not in license or passion, but by the calculating ferocity of scientific soldiers."

And this is not a comment on the present war. It was written in the *Fortnightly Review* of February, 1871, shortly before the unconditional capitulation of famished Paris, by Frederick Harrison, fortunately alive and still able to write and express himself usefully for his country and humanity.

The German has not changed. He is the undeveloped savage plus discipline and scientific training, but without moral development. His "god" is purely tribal, no better than the mumbo jumbo of the East African savage, something, in fact, which the Kaiser of the moment would like to be if he had the power of omnipotence. Materialism has supplanted morality, and religion has ceased to have that utility which even Gibbon, the first acknowledged agnostic, described when he said that "to the philosopher all religions are false, and to the magistrate all religions are useful."

There has been no change, and there can be no compromise between what is essentially evil and what the awakened conscience of mankind knows to be good.

### Wouldn't Be Without It.

C. E. WILSON, Vice-President Bank of Crewe, Crewe, Virginia.

Yes, keep on sending me the paper. I wouldn't be without it for many times the price. You are all right on all public questions, so I think.

## Big Dam at Muscle Shoals Authorized by President Wilson

[Special Dispatch to Manufacturers Record.]

Washington, D. C., February 26.

A water-power dam which will provide power not surpassed in this country will be constructed at Muscle Shoals, Alabama, according to an order just signed by President Wilson. The War Department has been directed to proceed at once with work on the project, which is a part of the vast plan for construction of a Government plant for the fixation of atmospheric nitrogen to be used in manufacturing munitions and fertilizers.

The provision for this full utilization of the water-power on the Tennessee River is admitted to be one of the greatest steps in the industrial development of the South. Not only will building of the dam, involving the expenditure of from \$15,000,000 to \$20,000,000, insure the requisite power to provide for the manufacture of munitions and the ultimate use in fertilizer work for times of peace, but it is said that electricity will be generated sufficient to meet the needs of every town in Tennessee and Alabama.

The dam site has been offered to the Government without cost by the Alabama Power Co., which already has a contract to furnish 35,000 horse-power to the Muscle Shoals nitrate plant by June 1. The company has also agreed to transfer options on about 75 per cent. of the land which will be affected by the overflow from the dam.

Members of Congress from Alabama and Tennessee have expressed themselves as delighted over the successful culmination of their long fight for the power development at Muscle Shoals. They frankly state that the energetic methods of the MANUFACTURERS RECORD in backing the project has been most helpful in securing the dam.

Senator Bankhead stated to the representative of

the MANUFACTURERS RECORD that he believed that a city of 50,000 people will result from the work at Muscle Shoals within five years, and that the Government will continue to expend large sums on the project. The dam, which will be known as No. 2, will be constructed under the supervision of the chief of engineers for rivers and harbors of the War Department, and will be a mile wide and 105 feet high. It has not yet been determined whether the work will be done by day labor or by contract.

The navigation of the Tennessee for the greater part of its course is assured by the construction of the dam at Muscle Shoals, and this is expected to aid largely in the future use of the nitrate plant. The raw materials essential to the manufacture of fertilizer are all close at hand. Phosphate rock, limestone, coal and coke can be had in abundance, and water transportation will be available.

It was pointed out by Representative Edward B. Almon of Alabama that the Muscle Shoals site is ideal for a munition plant, being well inland and at the source of supply for materials. Later, when the plant is largely devoted to the manufacture of fertilizers, this central location in the South will be a factor in the distribution of the products.

The extent to which the Ordnance Department of the War Department expects to utilize the plant in the munitions work has not yet been revealed by officials. The original appropriation providing for the Muscle Shoals project carried with it an appropriation of \$20,000,000. It is stated, however, by officials that at least \$80,000,000 will be expended in the plant as now being built, and this additional \$40,000,000 will be provided by the war appropriations handled by the War Department.

### Work That Should Be of Real Value.

(Twin City Sentinel.)

In different parts of the country there are being organized Vigilance Corps under the direction of the National Defense Society. There seems to be in no few localities a very definite need for such service as they will perform, and we believe it is going to prove of decided value.

A letter in the current issue of the MANUFACTURERS RECORD tells of such an organization in an Arkansas town, and the work it is doing. The writer says:

"We are canvassing the township thoroughly, and will list every person, either loyal, disloyal, or doubtful or unknown, as prescribed by the national society, and persevere until we know how every person in this part of the county stands. The pamphlets by Dr. Hillis and your 'America's Relation to the War,' which we are ordering will be handed to those we have reason to believe have been misinformed or whose loyalty is in doubt.

"Much good can be accomplished and material aid given to the Government by a thorough and general organization of this National Defense Society in every city and township. The fact that we must all do whatever we can in every way to help win this terrible war is beginning to soak into the minds of us here in the rural districts of Arkansas, and wheatless, meatless and other days of self-sacrifice are being observed. As our boys are fast leaving for the training camps and the battlefronts we begin to realize the fact that we are at war with a foe that will tax our energy and resources to their utmost to win."

There are people in communities all over the country who are misinformed about this war. As a result of such misinformation they do not take the interest in movements pertaining to the conflict that they should take. To give such people information that will awaken them to the importance of the struggle is a matter of vital importance, and the Arkansas organization referred to has made a mighty good start along this line in its decision to circulate a large number of copies of Dr. Newell Dwight Hillis' wonderful address

on "German Atrocities in France and Belgium." We do not see how any man or woman can read his utterances on this subject and still be indifferent regarding this war in which the nation is engaged.

And, in addition to the people who are misinformed about the war, there are those in many communities who are simply disloyal. There is no other word to express it. They are pro-German, not through ignorance, but through preference. A Vigilance Corps, such as the one organized in Arkansas, can be of value in "keeping tabs" on the doings and sayings of such people, and reporting them to the proper authorities.

This war is a serious business, and no foolishness in connection with it should be tolerated. Those who do not aid in war movements because of ignorance should be informed; those who are acting in opposition to such movements for other reasons and who are saying things that are not calculated to help the nation in the prosecution of the war, should be handled by the law if there is any way to do it. And if the law along this line does not reach far enough, Congress should use some of the time now being consumed in useless criticisms, and enact a law that does.

The Vigilance Corps idea is a good one. The organization of hundreds of such societies throughout the country would doubtless be of decided benefit. Even if they did nothing more than to put into the hands of those who do not understand the war, positive information on the subject, they would prove well worth while.

### Praised for Its Patriotism.

CHAS. C. BRASWELL, Atlanta, Ga.

I am enclosing check for subscription to the MANUFACTURERS RECORD. Keep the good work going on. This is the best paper ever published for the man who loves his home, his State and his country, and the development of it. You are doing more to the upbuilding and improvement of the South than all the daily papers combined. It has all the local and world-wide news of importance.

## NATIONAL PROHIBITION AS A GREAT ECONOMIC ISSUE VIEWS OF MANY IRON AND STEEL PEOPLE

National Prohibition as a great economic issue of the hour, even if we have no regard to the moral side of the question, is commanding such universal attention from the business men of the country that following the remarkable petition to Congress published last week in behalf of National Prohibition, and signed by a thousand of the leading business men of the country, we are glad to publish the accompanying individual letters from a number of leading iron and steel concerns received within the last two weeks.

On February 2 the Manufacturers Record wrote to a number of iron and steel manufacturers a letter of inquiry on the subject of National Prohibition as a war measure, in the course of which it was said:

"We have recently received from a large number of coal operators letters to the effect that if there was National Prohibition of the liquor traffic as a war measure it would be possible to very largely increase the output of coal. \* \* \*

"The subject is one of such profound interest to employers and employees that I should appreciate a statement for publication of your views as to the desirability of prohibition as a National issue to aid in winning the war.

"In your view, would National Prohibition at the present time as a war measure increase the efficiency of labor and permit of enlarged production of coal and iron and steel, ships and other things essential to winning the war? The supreme necessity of the hour requires that all of us should do our utmost to enlighten the nation upon these points. That is my explanation for this letter.

"Many coal operators claim that National Prohibition would enable them to increase their output of coal from 10 to 20 per cent. Some think even greater results in increased output would be obtained under National Prohibition."

In reply to this inquiry we have received a number of letters, all of which are published with the exception of two, one strongly in favor of National Prohibition and the other opposing it, but both requesting that their names should not be published, which, therefore, makes their letters unavailable since anonymous letters bearing on a question of this kind cannot possibly carry any weight.

It is an interesting fact that with hardly an exception the letters which have been received and published below are enthusiastically in favor of National Prohibition, and especially so because National Prohibition, they say, would strengthen the nation's power to win the war.

We cannot better sum up the whole situation than to emphasize the clear-cut, vigorous discussion of this great issue in the opening letter of this symposium by President J. A. Campbell of the Youngstown Sheet & Tube Co., one of the greatest industrial concerns in America.

### National Prohibition Would Conserve Grain for Food, Release Labor for Essential Industries and Increase Efficiency for Winning the War, the Supreme Question of the Nation.

J. A. CAMPBELL, President the Youngstown Sheet & Tube Co., Youngstown, O.

Considered as a measure toward winning the war—the only thing really worth while at this time—the abolition of the manufacture and sale of alcoholic liquors seems to me highly desirable.

National prohibition would not only conserve a large quantity of grains for food, but it would also release much labor for the production of things essential to the conduct of the war. Another result would undoubtedly be increased efficiency of workmen in those industries where drinking has been common among them, such as the mining of coal.

The writer has already expressed this opinion to our Congressmen and Senators, as well as to the President, and sees no reason for changing his views on the subject.

This is a time when the nation needs every ounce of its efficiency. One of the country's most serious problems is the scarcity of labor arising from a sudden and great increase in the amount of work to be done, together with the organization of a large army. We face the predicament of having much more to do, with far fewer men to do it.

In view of this situation, I am of the opinion that anything tending to add to the efficiency of labor, as well as anything lessening non-essential production, is both patriotic and necessary. I would even urge the Government to restrict to a certain degree the manufacture of everything not absolutely needed. Makers of automobiles for pleasure use, musical instruments and similar luxuries should be required to reduce their output 50 per cent. At the same time, other plants engaged only partly on essential things should be re-

quired to discontinue as far as possible the production of anything not absolutely needed for the war. Such restriction would not involve disorganization or demoralization to a serious extent, but it would make available a large amount of labor for the work that must be done to put the country on a war basis.

In spite of all that has been written and spoken on the subject of efficiency, I feel that the men who work with their hands have not yet learned its tremendous importance in helping to win the war. Many examples could be cited to prove this, the problem of transportation being one of them. It is probable that in this industry wages should be increased to the same basis as those paid in others, but until the railroad workmen are brought to feel that patriotic duty demands of every man his best efforts, this vital problem will not be solved.

There is so much evidence of this condition on all sides that I wish some method could be devised by which the workingmen of this country might be reached and impressed with their responsibility. If they can be made to appreciate that every hour lost is so much given to the enemy; that every honest day's work makes it easier for us to win; that every man who loafs on his job or stays away from it without necessity is a deserter under fire, our national strength will be tremendously increased. Great as is our task of providing ships and munitions and food for our army and our Allies, there is labor enough to do it if every man is willing to do his best and no labor is wasted or devoted to unnecessary tasks.

Many thousands of our people are giving much of their time and money, spending long hours without pay on behalf of the Government, the Red Cross and other patriotic organizations, but much of their unselfish work is being neutralized to some extent by the careless inefficiency of others who do not feel their responsibility or do not realize how much they could do towards winning the war by giving their best efforts to the work in which they are engaged.

### Of Highest Importance Now That Entire Nation Shall Remain Sober.

CHARLES L. HUSTON, Vice-President and Works Manager Lukens Steel Co., Coatesville, Pa.

We would now confirm with still greater emphasis our firm conviction, based upon experience, that the prohibition of the liquor traffic would result in much greater steadiness of operation of industrial plants and the output of material, such as steel plate, which we make and upon which the Government is depending as a vital element in its conduct of the war, and that transportation matters would be substantially increased. The enclosed folder shows the result of a year's freedom from the local licensed liquor traffic during the year 1913.

We have also had during the past year a similar condition owing to the closing of all places licensed for the retail of liquor in Coatesville, because the license holders were proved to have violated the law, and the new owners of our neighboring establishment, the Midvale Steel & Ordnance Co., with their large plant, are so thoroughly convinced of the benefits that they are joining in an effort to keep the licenses from coming back again this coming spring. We have for years been very watchful to prevent the bringing in of any liquors by the men to be used while they are engaged at their occupation in the works, but we are also more than ever firmly convinced that the dependability of all the men, particularly the lower grades of workmen, would be greatly increased by the entire prohibition of the traffic, so that they could not go elsewhere in the outskirts and secure liquors and could not get it to bring in with the men or use in their homes, social clubs, etc.

We also feel that in these times of great stress and strain it is of the highest importance that the entire nation should maintain in the highest degree its sober, calm judgment in order that all the very difficult questions that arise may be settled in the very best way and not under the excitement or the bias that is inevitable when even what are considered small amounts of alcoholic stimulants have been indulged in.



### National Prohibition Absolutely Essential During War Period.

E. T. WEIR, President Phillips Sheet & Tin Plate Co., Weirton, W. Va.

I am more convinced than ever that national prohibition of the liquor traffic is absolutely essential during this war period. It would have the effect of greatly increasing not only the production of coal, but of other commodities which are particularly required to carry out the war program in the United States.

The successful outcome of the war depends very largely on our industrial activity, and to what extent this is carried out depends upon labor and its interest and activity in the war program from an industrial point of view.

### Efficient and Economic Business Operation Demands Prohibition.

WILLIAM U. FOLLANSBEE, President Follansbee Bros. Company, Pittsburgh, Pa.

We have before advised you of our firm and unchanging belief in prohibition, municipal, county, State and national. We have definitely proven the advantages and secured the benefits of prohibition in municipalities and States. First, through there never having been a saloon in the town of Follansbee, W. Va., and second, because West Virginia is "dry." These two factors resulted in great gain morally and physically to our 1500 employees and the consequent economic advantage to our business.

Following an experience of many years, we unhesitatingly state that every factor influencing efficient and economic business operation demands prohibition. In our opinion, there is nothing that will contribute in so large a measure to the winning of the war. Complete action should be taken without delay to secure nationwide prohibition in the United States and all the countries of the Allies.

### Alcohol Seriously Impairs Man-Power—Physical, Mental and Moral.

JOHN M. YOUNG, Vice-President Sweet's Steel Co., Williamsport, Pa.

We do not recall at this time what we said in previous correspondence regarding the prohibition of the liquor traffic. We say now, however, that anything said along these lines at that time is infinitely emphasized by the conditions existing today. The irony appears more marked when we consider that we are asked to deny ourselves of what go to make brawn and brain in the interest of existing conditions, while comparatively free rein is given to the use of these same grains in a manner which seriously impairs man-power—physical, mental and moral.

We speak the more emphatically, not only from our observation, but from the experiences with which we are confronted in our every-day business.

### National Prohibition Essential Toward Winning War.

W. H. WOODEN, President American Car & Foundry Co., New York.

We are entirely of the opinion that national prohibition at the present time as a war measure is essential toward winning the war. There is no doubt but that it would increase the production of all manufacturing establishments.

### Prohibition as War Measure Would Mean Enlarged Production of Coal, Iron, Steel, Ships, Etc.

JOS. A. KELLY, President Reliance Steel Casting Co., Pittsburgh, Pa.

It is our opinion that national prohibition at the present time as a war measure would increase the efficiency of labor and permit an enlarged production of coal, iron, steel, ships and other things essential to winning the war.

### Heartily in Favor of Prohibition.

J. TURNER MOORE, President and Treasurer Reading Steel Casting Co., Reading, Pa.

We have not changed our opinion on this subject in any way. We are still heartily in favor of national prohibition at all times, in all parts of the country, for all people.

### Believes in Prohibition in Time of War or Peace.

JOHN B. BERRYMAN, First Vice-President Crane Co., Chicago, Ill.

National prohibition would unquestionably increase the efficiency of the people as a whole in time of war or peace.

### More Than 75 Per Cent. of Absence Due to Drink.

CHARLES ZORM, President and Manager the Canton Malleable Iron Co., Canton, O.

There has not been anything to change our views from our letters to you of 1915 and 1916 with reference to prohibition. We do not know of any one thing that does more damage to the manufacturers of iron and steel than the liquor evil.

During the past year we might state that an average of 15 to 20 per cent. of our employees were absent daily, and of this percentage, we might state that better than 75 per cent. were off due to drink, and we are under the impression that this would be eliminated should there be a nation-wide prohibition.

Unfortunately, we were not in a position where we could discharge employees, as the labor situation was very acute, but we are fast weeding out all men in our employ that drink. In our opinion, it is very dangerous to have a man of this kind around the factory. We want to assure you that as far as we are personally concerned, we are 100 per cent. for national prohibition; the sooner the better.

### Would Be a Blessing to Country at This Time.

E. M. ZEUNDER, President Scranton Bolt & Nut Co., Scranton, Pa.

Prohibition cannot come too quick to suit me. It is my opinion it would be a help to all manufacturers and a blessing to the country at this time.

### Self-Evident Fact That Booze Cannot Win War

J. T. SARRATT, Vice-President and Treasurer the Buckeye Rolling Mill Co., Steubenville, O.

It seems to us to be a self-evident fact, and one admitting of no successful controversy, that booze cannot win the war, and if it cannot, some other method should be applied.

### Would Unquestionably Aid Efficiency.

TURNER D. MOORHEAD, Vice-President and Treasurer Moorhead, Brother & Co., Iron and Steel, Sharpsburg Station, Pittsburgh, Pa.

As far as our own personal industry is concerned, national prohibition will unquestionably aid our efficiency.

### Larger Outputs Would Follow National Prohibition.

E. FRANK CONNER, General Superintendent Slatington Iron & Steel Co., Slatington, Pa.

Nothing has occurred to change my mind in reference to this all-important subject, especially as it covers so vital a question, that of efficiency, not only in the common labor class, but in all classes of employees.

Since writing you we enclosed our property with a fence so as to make it that much easier for our men to abstain from habits that had been formed of visiting a saloon nearby during working hours, and while we were compelled to resort to these expensive measures, it has

fully repaid us, and then, too, in a number of cases we have increased to a very large degree the efficiency of some of our most important employees. The most gratifying and most satisfactory thing is the congratulations we have received from some of our employees who have been able to help themselves to such an extent by having the temptation removed, at least to this measure.

We therefore do not hesitate to say that national prohibition as a war measure would result in increased efficiency, and naturally would follow in larger outputs of all commodities necessary to win the war.

### Greater Efficiency in Labor from Prohibition.

J. D. OLIVER, President Oliver Chilled Plow Works, South Bend, Ind.

My personal view is that national prohibition, as a war measure, would materially increase the efficiency of labor and result in the enlarged production of the things essential to winning the war.

### Prohibition Would Increase Efficiency and Permit Enlarged Production.

ROBERT C. LEE, Secretary and Treasurer the Robesonia Iron Co., Ltd., Philadelphia, Pa.

It is my opinion, in which I am joined by other officials of this company, that national prohibition would increase the efficiency of labor and permit of an enlarged production of materials essential for war purposes.

### Heartily Approve of Prohibition as War Measure.

HARRY B. SMITH, Secretary and Treasurer McInnes Steel Co., Ltd., Corry, Pa.

Relative to national prohibition of liquor traffic as a war measure, would say that we would heartily approve of this measure, as it would surely increase the efficiency of labor along all lines.

We sincerely hope that this will be brought about at the earliest possible moment.

### Under Enforced Prohibition Fewer Employees Produced Larger Output Per Man.

W. A. FORBES, President and Manager Rockford Malleable Iron Works, Rockford, Ind.

As probably you are aware, Rockford is a dry city, and in dry territory, as it has been for some years. Last summer, while the national cantonment was being built, just a mile from our plant, there was a serious scarcity of labor of all kinds which caused a great shortage of help to the manufacturers. In our own factory, with a lessened number of men, because of the additional precautions taken against liquor coming into Rockford, we derived a greater output per man than ever before.

We cannot help but think that with liquor barred there would naturally be a greater impetus to all classes of labor. We may say that the few men we have employed, who used liquor to any great extent, have long since lost their recognition as good workmen.

### National Prohibition Great Factor in Increasing Coal Production and General Efficiency in All Industries.

A. M. BELL, Secretary and Treasurer, Spang, Chalfant & Co., Inc., Pittsburgh, Pa.

With regard to production of coal, we think that under the existing condition of utterly inadequate transportation facilities the use of liquor has very little to do with decreasing coal production, for the reason that when the mines are receiving only a small percentage of the cars they could load there are plenty of men to load these cars promptly. Of course, if the men who were off on account of liquor were at work on the days upon which the mines had cars, the cars would be loaded in less time; but as it is, these cars have been loaded out much faster than the railroads have been able to handle

them, so we do not think that the coal production in the districts in which we are interested has been noticeably interfered with in any way except by lack of transportation facilities, and think the coal shortage over the country is entirely due to this cause.

On the other hand, if the mines were getting sufficient cars to operate to full, or nearly full capacity, we think national prohibition would be a very great factor in increasing the output, as every miner's services would then be needed every day to keep up the output of the mines, and there is no question but that many of them waste a large portion of their time drinking, which time would not be wasted if they were unable to secure liquor.

It is our experience that many miners do little or no work for from one to three or four days after pay-day, due to liquor, and if cars could be furnished to haul all the coal that the miners could produce, it is certain that the prohibition of the sale of liquor would increase the production of coal by the amount that the men would lose who would otherwise be wasting their time drinking.

Assuming, or at least hoping, that measures are being taken that will provide sufficient cars to handle the full production of the mines of the country, we think national prohibition would be a great factor, not only in increasing the production of coal, but in increasing the general efficiency of labor in all other industries, thereby enlarging production in all lines of business.

### **Saloons and Drinking Places Cause a Loss of 20 to 25 Per Cent. in Output.**

E. J. RENSHAW, General Manager Nicetown Plate Washer Co., Philadelphia, Pa.

We firmly believe, in fact we know from experience, that 20 to 25 per cent. more work would be turned out with the same amount of labor if there were no saloons or places where men could procure intoxicating drinks.

We would go still further and say that if the money lost to the different companies through the men staying away from their work on account of it, and at other times not being fit through having had too much the night before or before coming to work, it would be possible to pay higher wages and bring a very much better feeling between employe and employer.

### **Men Would Be Benefited if Temptation Was Removed.**

J. S. STILLMAN, Secretary-Treasurer Empire Steel & Iron Co., Catsauqua, Pa.

No statistics are kept by us as to loss of time or inefficient workmanship brought about by use of alcoholic liquors by our employes.

We have endeavored to use our interests wherever possible in the direction of sobriety among our workmen, and there is no question that if temptation were removed the efficiency of the men would be greatly increased. At times during the past year we have been gratified to note the evidences of less drinking among our employes, but during the past two months we have noticed the effect of the holidays, particularly among the foreign element.

### **Not a Prohibitionist, But Believes in National Prohibition from Economic Standpoint by Adoption of Constitutional Amendment.**

C. LA RUE MUNSON, Candor & Munson, Williamsport, Pa.

I am president of two large manufacturing companies and a director in a good many more, and have given the subject to which you refer much thought. I am not a prohibitionist, and do not believe in prohibition politics, but I am heartily in favor of the present prohibition movement which is so rapidly obtaining control of this country. I view it entirely from an economic standpoint, and I believe I express the sentiment of many persons who have given it special thought that the best thing that could happen to this country would be the adoption of the national prohibition amendment by the required number of States.

### **Believes in Necessity of Prohibition in Developing Efficiency.**

C. W. MARTIN, Vice-President the Deforest Sheet & Tinplate Co., Niles, O.

Nothing has occurred in our experience, since our previous letters to you on this subject, to lessen our belief in the necessity of prohibition in developing efficiency.

We, of course, prohibit the use of alcoholic drinks during working hours, and we will not permit a man to go on duty when at all under the influence of alcoholic liquor. We do not go so far as to prohibit drinking when off duty, because we have no way of enforcing such a prohibition. However, we do not retain in our employ any habitual drinker.

### **Convinced National Prohibition as War Measure Would Secure Largest Possible Output of War Essentials.**

T. J. GILLESPIE, Secretary and Treasurer Lockhart Iron and Steel Co., Pittsburgh, Pa.

We have had no reason to change our mind as to the advantage of National Prohibition as a war measure. In our judgment the effect on labor would be greatly increased, and a larger production of all classes of material essential to the winning of the war would be secured if such a measure were enacted.

We cannot give from our experience any definite statement as to such a measure increasing the output of coal, but all the evidence we have is to the effect that the output of coal would be very largely increased could we secure National Prohibition. You are aware, however, that the fuel shortage which we have lately experienced has been due to transportation difficulties, rather than to any other cause. However, this, we think, will soon be remedied.

It is exceedingly important that the largest possible output of coal be secured, and we are convinced that National Prohibition as a war measure would prove very effective in securing this desired result. This applies as well to all other products which are necessary to the prosecution of the war.

### **National Prohibition Would Result in Increased Production.**

ROBERT H. IRONS, President Central Iron & Steel Co., Harrisburg, Pa.

The use of intoxicants by any of our employes is sufficient cause for their discharge, although we have no positive rule regarding same. No liquor is permitted on the place, nor are employes under its influence allowed to work.

Unquestionably, time is lost when it is used to excess, and, therefore, National Prohibition would result in increased production.

### **Not in Favor of Propaganda for Side Issues at Present, But Believe Prohibition Would Be Good for Country—"Eventually, Why Not Now?"**

WALTER CLARK RUNYON, President the Struthers Furnace Co., the Struthers Coal & Coke Co., New Salem Supply Co., Cleveland, O.

As I do not attribute the failure of the coal supply to the lack of national prohibition of the liquor traffic, but to more direct causes, and while in a general way I believe prohibition would be for the good of the country, yet I do not regard it as the panacea for our present troubles, and the quicker we get the source the quicker will be the desired results. Less politics and sound business judgment are the desiderata.

The superintendent of our mining property reports plenty of men, but lack of cars.

The superintendent of our blast furnace made the statement to me the other day that perhaps if they would embargo the liquor traffic they would not have to embargo shipments to so many points.

I am not in favor of the propaganda for national

prohibition, woman suffrage or any other side issue at the present time.

Transportation is the solution. I would abolish all the commissions and place that matter in the hands of the railroads, first repealing the Adamson law and next giving the railroads the financial assistance necessary for them to equip and handle the business of the country.

American business men are capable of meeting all the emergencies that have yet arisen, but they cannot do so when hampered by politics. Get a proper spirit of patriotism into the labor element of the country so as to avoid strikes (we have found our men patriotic to the last degree) and turn American business men loose and you will see how quickly they will meet the situation. If the country is kept prosperous, the Government will not lack money to win the war. Knock off the shackles from business and let Congress show confidence in the intelligence, honesty and efficiency of our people, and we will surprise the world.

### **Installed Restaurant at Plant to Keep Men from Visiting Saloons at Noon and Midnight.**

FRANK A. HUBER, President and Treasurer the Marion Steam Shovel Co., Marion, O.

We prohibit intoxicating liquors to be used on our premises, and discourage its use just as much as possible.

We have lately installed a cafeteria restaurant in our administration building to take care of our men at the noon hour and at midnight, in order to keep them from lurching at saloons.

However, we do not feel that anything of this kind should be taken up during our present crisis, as the Administration has its hands full with matters pertaining to the war.

### **But How About Other Industries?**

D. R. JAMES, the Empire Rolling Mill Co., Cleveland, Ohio.

We do not think the liquor traffic is responsible for the coal situation today. The reason the mines are not producing their capacity of coal is because they cannot get cars to move it.

We have nothing to add to our last letter to you, and we are not disposed to charge the liquor traffic with conditions they are not responsible for.

### **Prohibition Good Thing for Proprietors, Too.**

T. W. LUDLOW, President Springfield Malleable Iron Co., Springfield, O.

Undoubtedly prohibition would certainly be a benefit not only to the miners, but also to workers in all other classes of business.

It would increase the efficiency of the men, and it would also be a good thing for a great many of the proprietors.

### **New Company Organized to Bore for Oil in Louisiana.**

New Orleans, La., February 25—[Special.]—Ten oil wells, it is announced, are to be put down this year in Louisiana by the Louisiana Southern Oil & Gas Co., a new concern capitalized at \$500,000 and holding leases in Terrebonne, Rapides and Avoyelles parishes. Work on the first well, in Terrebonne, will start within 60 days, officials state.

Headquarters for the new company have been established in New Orleans. With one exception, officers and directors, as follows, are New Orleans men: C. C. Gaspard, president, secretary Federal Land Bank; Herman Levy, first vice-president, Levy, Loeb & Co.; P. S. Schneidau, second vice-president, Schneidau Realty Co.; John Perez, secretary, attorney; Stonewall Jackson, treasurer, wholesale grain. Directors: W. Bancroft, Bancroft & Ross; Hugo Weideman, National Tube Co.; C. J. Weber, Friend & Weber; E. L. Weil, capitalist; Frank Constant, contractor, Alexandria. Charles Dickensheets is managing director; Sargent Fitcher is assistant; B. F. Bowles, field superintendent, and Dymond & Levy, consulting counsel.



# All Peace Discussion Now Is a Tribute to Unpunished Crime

WE NEED TO STEEL OURSELVES TO FIGHT, NOT TO PUSILLANIMOUSLY  
THINK OF PEACE.

[Samuel Harden Church, president of the Carnegie Institute of Pittsburgh, author of "The Life of Cromwell" and "The American Verdict on the War," has from the beginning of the European War seen with unclouded eyes the meaning of Germany's attack upon civilization. Few men have more fully understood than Professor Church the deep damnation and foulness of Germany's atrocity as voiced by its leading educators, the professors in its great universities, and by its men and women generally, as well as by its Kaiser and his military leaders. He had known long and intimately before 1914 many of the great university leaders of that country, and soon after the rape of Belgium he published in pamphlet form a letter of protest and warning written to some of these university men, denouncing the course of their country.

Shortly after the beginning of the great struggle in Europe nearly four years ago, Professor Church called attention to the fact that while we were talking so much about neutrality we should remember that Dante found in the Regions of Inferno a lower hell beneath all other hells reserved especially for those who were neutral in the great fight between Right and Wrong, between the Good and the Evil.

Professor Church now states the case as to the talk of peace in the following article in the New York Times, which should be read with careful thought by every man and woman who looks beyond what is sometimes the sentimental, immoral, spineless thought of the hour to the everlasting truth of Right. The Manufacturers Record would strongly urge upon every reader a study of the situation as presented by Professor Church, and especially to the closing paragraphs in this fearful arraignment of Germany's barbarism in which he shows that the civilized world should by hundreds of years of ostracism so condemn Germany, both its Government and its people, that

"Every German who has participated either potentially or directly in the commission of this world horror shall be brought to realize that in spite of their boasted claim to superiority as individuals and as a nation there can be no reproach in the whole history of mankind equal to that of being simply a German."

Professor Church has in this presentation done all civilization a service, and we would urge every newspaper in America to reprint conspicuously this ringing arraignment of the fearful, accursed, German-created horrors such as the world had never known.—Editor Manufacturers Record.]

By SAMUEL HARDEN CHURCH, President Carnegie Institute; author of "The Life of Cromwell" and "The American Verdict on the War."

The most dangerous element in the war situation today is the persistent discussion of peace. The fiery speeches which a few weeks ago were a feature of every gathering, and which used to stir our people into high enthusiasm and a strengthened purpose, are now seldom heard. The editorials in most of the newspapers seem to have lost much of their potency and are more concerned with the ending of the war than with its victorious prosecution. When this groundless cry of peace is coupled with the diplomatic fiction that we are at war with the German Government, but not with the German people, it is not difficult to perceive that the psychologic force of this policy is causing a perceptible slowing down in the war tendency of our people. Yet all the time the Germans press on, unfaltering in their united purpose of conquest.

Just a few days ago, while in conversation with a citizen of Pittsburgh, who is at the head of a large industrial establishment which is doing an important part in war preparation, I was startled to hear him say: "The war is over, and all this hurry-up work that we are doing is pretty much a waste of energy." This man's opinion is not at all an exceptional one, as we can hear the same sentiment uttered by intelligent and patriotic men wherever war preparation is their topic. If something is not done immediately to counteract this perilous discussion of a peace which has no existence in the brain and conscience of the German Government and people, it is not hard to foresee that our country will be lulled into a condition of general apathy from which it will be too late to arouse it when the time for action and its resultant story of tragedy shall occur.

What articulate voice is there in the whole of Germany that has at any time uttered a single word which would indicate that Germany will make an acceptable peace? Not one in the whole empire—not one. Only yesterday the Emperor—that arrogant swashbuckler, riding up to his bridles in blood—flung out this defiance:

"We desire to live in friendship with neighboring peoples, but the victory of German arms must first be recognized. Our troops under the great Hindenburg will continue to win it. Then peace will come."

Now, why should President Wilson and Mr. Lloyd George persist in uttering their peace declarations when the untamed savage who unloosed himself upon this international debauch of murder, outrage and robbery stands thus gloating in his con-

quest? What has become of that splendid assurance of Mr. Lloyd George that Great Britain would never make peace while the criminal is stronger than the law?

The German Emperor speaks for his Government and people. They are all of one mind. Before the war he made them this speech:

"You Germans have only one will, and that is my will; there is only one law, and that is my law; there is only one master in this country, that is I, and whoever opposes me I shall crush to pieces."

He said that, and there was not a man in the empire who would heave a brick at him. The German people are so dog-like in their obedience, so servile in their fear of authority, they have so far degenerated in their corrosive egotism, have been made so drunk by a State control which has obliterated from their minds all those fundamental principles of justice and righteousness which alone can exalt a nation, that an appeal to them to overthrow their military masters is unworthy of the consideration of those great statesmen who in Washington and London are attempting to give utterance to the aspirations of an oppressed world. German public opinion, or the thing which is paraded as German public opinion, has all been invented to serve the occasion.

No group exists in Germany which possesses any public honesty, or which can be believed to speak with its own voice. Karl Liebknecht has been thrust into prison and hence is silent. All the rest of them are willing slaves.

While Germany was definitely beaten on the western front on the fortieth day after she began the war, and has steadily been losing on that front since then, she has been so successful on her eastern front that her dream of reaching the Persian Gulf seems within her grasp, and she is never going to yield until the sword is struck from her hand. Hence, there is no peace party in Germany, and no desire for peace there. War, as Talleyrand said, is their national industry. The German newspapers are carefully fed on official copy. Even the Socialist journal, Vorwarts, is controlled by an editor chosen because he can be trusted to serve the Government, and the grave edicts which are issued every now and then from Berlin suspending that paper for a few days are all a part of the official camouflage. Nowhere are there sincerity and honor. The debates which occur in the Reichstag are palpably unreal, the members of all parties first making such oratorical flourishes as may be suitable to the moment, and then winding up

in common agreement upon the effectiveness of the general policy of blood and lust.

**Mr. Lloyd George and President Wilson have sent to these German murderers of humanity a hundred challenges to state their ultimate intentions concerning Belgium and Northern France, and they have been answered a hundred times only with contemptuous silence. Why, then, should they divert the minds of the allied peoples from the heroic task of driving the barbarian hordes back from Belgium and France when we already know that Germany means to retain Belgium and Northern France in her permanent custody? We have that purpose solemnly declared in the last testament of General von Bissing, the former Governor-General of Belgium, the man who shot Edith Cavell.**

"We are going to keep Belgium," says this stalwart Hun. "We are going to make her people serve us, or exterminate them, as we should have done in Alsace and Lorraine. If the Belgium dynasty should become too vociferous, we must assassinate King Albert. As for France, we shall extend our conquest to Calais, so that the western boundary of the German Empire shall run from Calais, in France, to Basle, in Switzerland. And this will put us in a strong position to fight the next war. These are grave decisions, but they must be taken. In all this I speak the mind of my royal master, the Emperor and King."

That was Von Bissing's declaration as death approached him.

**Von Bissing says another thing which completely refutes the unjustified theory of President Wilson that the people of Germany are opposed in their minds to their military masters, for he declares that if they give up Belgium the German people will rise against them.**

Von Tirpitz and every member of that infamous world-conquering group who has ever spoken for Germany testify in the same strain. Germany has won by the sword these territories of her peaceful neighbors, and she is going to keep them as an advantage for the next war, and if King Albert objects too loudly he must be secretly slain.

**It is the mind of their royal master, and the foul mind of the Kaiser is the mind of the German people. Statesmen, soldiers, professors and preachers have declared it a thousand times. It is the ordained destiny of Germany, given to them by Almighty God, that they shall kill the men, dishonor the women and plunder the land everywhere. And while our brave troops march up to that raging battle front, the listening Senates at London and Washington resound not with an invincible call to win against hell and death, but with an academic formulation of peace and an exaggerated eulogy of our foe which are bound to weaken the spirit of war everywhere except in Germany.**

Mr. Lloyd George and President Wilson both know that the peace they dream of can never be attained by negotiation or by any other form of moral influence, but only by the sword. We never hear these peace proposals from France. That gallant country, whose fortitude is the wonder of the ages, fights on forever with the unshakable purpose of victory. Then why should Great Britain and America dissipate their martial strength by laying down peace terms before eyes which read them in derision? Peace? Away with it, once and for all! Let us go back to Mr. Lloyd George when Mr. Lloyd George was at his best, and let us resolve that we shall never discuss terms of surrender with a criminal that is stronger than the law. Why state our aims? There is only one imperative war aim in the world today. That is easily stated. Let us say to the German Government and people: "We have constituted ourselves a League to Enforce Peace. We are twenty-one nations in arms against you. Your armies stand outside your own boundaries. You have destroyed the peace and dignity of the world. We declare you to be the outlaws of civilization, and we mean to drive your armies back into Germany and make you pay the bill. Until that supreme and only object of this war is attained we shall not again discuss peace."

**Then let us take up our burden and prepare for a long war, whose aim shall be a victorious peace, to be won probably in the autumn of 1919, and let us never pause until we shall have achieved that purpose.**

A peace by negotiation, giving and taking advantages, would be an outrage on the millions of brave men who have given their lives in the heartbreaking effort to drive the Germans out of their lands. What heroes these men are who have died in a great and chivalrous

cause! And what a contrast do we find in the German casualties—every man of them an invader and dying on a foreign soil an outlaw's death! Every household in Germany carries this sorrow—the outlaw's death—every household, except the Emperor's, whose six stalwart sons have never been under fire.

**And when we shall have driven the murderers into their own country let there be constituted a high court of justice, as was done in Cromwell's time, which shall bring to a just punishment and execution the chief delinquents who have brought this horror on the world—the German Kaiser, his eldest son and that group of piratical counselors who fed the Kaiser's vanity and supported his unholy ambitions. Kill the rulers who made this war, and we shall never again be troubled with an aggressive dynasty.**

As for the German people, I am beginning to wonder in my mind what the ultimate expiation of Germany is going to be. Is it possible that the world will permit Germany to say, as a Western outlaw might say: "Gentlemen, the drinks are on us!" and with the payment of certain fixed indemnities assume once more an equal station among the civilized nations of the world? The speeches at London and Washington do indeed tend toward this.

**But is there not something beyond the mere making of peace which the world is going to exact of Germany? Is it possible that, with our minds fixed on the bloody feast on which Germany has made us sup so full of horrors, we can, on the mere making of peace, take these barbarians by the hand and greet them as brothers?**

Must there not be a continuing penalty for their pitiless iniquity? Are we going to resume immediately the exchange of German and American professors at our universities? Shall we ever in this generation subject our sons to the indignity of listening to a German professor's discourse on the higher values of life? Are we going to send our sons to German universities for the completion of their education? Are we to ride once more in German ships, even though they may be the best in the world?

**Shall we ever again purchase a thing that is made in Germany? Are we going to accept the German traveler with this bloody stain upon him into the gracious hospitality of our homes? To me all this is unthinkable.**

One of the German statesmen has recently spoken of peace and reconciliation. Peace with the Kaiser, who declared only yesterday that he would never make peace until with bloody fist he had struck his victim to the earth! And reconciliation? Von Bissing sneers at the word. No. The mood for peace has gone.

**Peace we shall have when we have won it by the sword. But reconciliation—never! No, not in a hundred years. Money and land can never atone for an infamy like theirs. The tears of a contrite heart conscious of its shame will alone expiate their crime. Yet a contrite heart is a thing which the savage tribal German of this age has never carried in his bosom.**

Nothing but a good beating and the lasting scorn of human society can sting that stiff-necked nation into a reformed penitence that will make safe and good neighbors of them. The civilized world should condemn Germany—both her Government and her people—to a hundred years of ostracism, so that every German who has participated, either potentially or directly, in the commission of this world horror shall be brought to realize that, in spite of their boasted claim to superiority as individuals and as a nation, there can be no reproach in the whole history of mankind equal to that of being simply a German.

Let us go on with this war in confidence and courage until we shall have conquered the foe by an organized military power stronger than his own. No nation can conquer the world. Germany is a great military power, but she is overrated, and her superior organization is fast wearing down. The other nations are rising to her own height. France can beat her at any time when the odds are no greater than two to one. The path lies straight ahead. We must go on in darkness and sorrow, perhaps, but always forward, until through victory we reach the light. And let us take our mood from Shakespeare: "In peace there's nothing so becomes a man as modest stillness and humility, but when the blast of war blows in our ears, stiffen the sinews, summon up the blood, disguise fair nature with hard-favored rage, and imitate the action of the tiger."

SAMUEL HARDEN CHURCH.

Pittsburgh, Pa., February 15, 1918.



## "Unsinkable" Type of Ship To Be Tested by Navy Department

[Special Correspondence Manufacturers Record.]

Washington, D. C., February 23.

The loss of the transport *Tuscania* and the recent sinking of several supply ships, with valuable cargoes of foodstuffs, has caused a renewal of interest in the practicability of the unsinkable ship as a further check to the German submarine menace.

Secretary of the Navy Daniels has just stated that the committee of naval experts appointed this week to investigate the system of buoyancy boxes installed on the converted Austrian liner *Lucia* will proceed to New Orleans at once for a test of the vessel. A prompt report upon the practicability of the non-sinkable ship can therefore be expected.

There has been an unexplained delay in testing the *Lucia* since the details of the plan were first submitted to the Shipping Board and the Naval Consulting Board. It is stated in some quarters that the shipowners themselves are opposed to spending money to equip vessels with the protective means, preferring to take the chance of losing the vessels and collecting the insurance.

Whatever has been the real cause for the tardy action, the recent losses at sea have awakened the Government officials as well as the public to the necessity of utilizing every means at hand to cut down the toll of the U-boats.

In a recent statement given to Congress by the United States Food Administrator it was shown that but 7 per cent. of food shipments were lost during 1917 as a result of the submarine attacks. The toll of food ships has materially decreased during the year. Some estimates, however, place the amount of food sent to the bottom of the ocean during the year at 1,800,000 tons.

The food production in the United States at the present time is not sufficient to allow any loss of foodstuffs if a means of prevention can be had. So serious is the need abroad for supplies that M. Andre, the chief naval constructor of France, who is now in this country, has urged the development of an unsinkable ship to insure the Allies against additional losses.

One of the principal arguments against the unsinkable ship fashioned after the plan of the *Lucia* is the loss of cargo space resulting from the installation of the buoyancy boxes. There are from 9000 to 10,000 of these boxes in the *Lucia*. They are made of ordinary pine and covered with a skin of galvanized metal, making them both air-tight and water-tight. The boxes measure about 1x2x3 feet, and are placed all along the inner skin of the vessel, and also in the cargo. The space occupied amounts to about 14 per cent. of the cargo space, and the cost of the equipment has been about 10 per cent. of the value of the ship.

It would appear, however, that shipowners should be willing to reduce the extent of their shipments if absolute safety is assured. The loss sustained through a shortage in cargo space would not be greater than the loss in cargo now due to the submarine successes, and with the increased safety factor, insurance rates on vessels will decrease materially.

Government officials who have been possessed with the idea that all new ships must be built with the greatest possible speed point to the fact that the installation of the buoyancy boxes in the *Lucia* was exceptional because of the experimental nature of the work. Mr. Donnelly recently stated that the Virginia Engineering Co. of Roanoke will undertake to fit out as many ships as its facilities will permit at the rate of about one a week, and at one-tenth the original cost of the vessel.

It therefore appears that the entire question of building unsinkable ships is one which deserves an early and thorough investigation. The Secretary of the Navy has recently stated that the newly-appointed board, of which Admiral A. G. Winterhalter is the chairman, will probably return from New Orleans to New York on board the *Lucia*. The nature of the tests to be made with the vessel have not been disclosed.

The inventor of the safety system of buoyancy boxes favored opening the sea cocks of the ship while she was in drydock, but owing to the delay in the Government investigation this was not done. It is possible that the experiment may yet be tried. The inventor is confident that if the hull is struck by a torpedo, or even by several torpedoes, and the vessel completely flooded, there will still be sufficient buoyancy to keep the ship afloat.

The derelict lumber schooners are pointed out as a vindication of the buoyancy theory. The individual boxes, before being installed in the *Lucia*, were subjected to numerous tests, and it was found that they resisted a pressure greater than would be placed upon them by the weight of a flooded ship.

The confidence of those who have equipped the *Lucia* with the safety apparatus is such that it has been requested that the vessel be sent into the submarine zone without a convoy, and with due notice of the route to be followed. The final test would thus be left to the Germans. The Shipping Board, however, is said to be unwilling to risk so valuable a vessel being sunk by the submarines, and will insist upon the usual convoy.

The appointment of the Winterhalter committee of naval experts will doubtless insure an equally conclusive test of the worth of the *Lucia* as a non-sinkable boat, under safer circumstances than in the zone of the enemies' operations.

With the question of the non-sinkable boat definitely settled, it will be possible for the Government to either proceed with the immediate construction of similar craft or devote its whole attention to devising other means of outwitting the undersea boats and putting a full quota of men and supplies into Europe.

### GREAT INDUSTRIAL CANAL AND SHIP-BUILDING PROJECT PLANNED.

New Orleans Proposes to Connect Lake Pontchartrain With Mississippi River, Providing Sites for Industries and Shipbuilding Plants—\$25,000,000 Involved in Final Estimates.

New Orleans, La., February 25.—[Special.]—The last obstacle to the industrial canal and shipbuilding docks for New Orleans was removed Friday, February 23, when the Board of Port Commissioners adopted the plan approved by the engineers and accepted the Hecht plan of financing the project.

The project includes a lock into the Mississippi 600 feet long between the gates, 70 feet wide and 18 feet deep over the sill, which will cost \$2,600,000, it is estimated. Beside an artificial basin ships will be built and launched sideways; provision will also be made for graving docks to establish the ship-repairing business here, and the canal, which will extend about nine miles to Lake Pontchartrain, will furthermore furnish excellent industrial sites.

The route of the canal, while practically determined, has not yet been formally announced. It will, however, enter the heart of the city.

The plan of Rudolph S. Hecht, vice-president of the Hibernia Bank & Trust Co., contemplates a bond issue of \$3,500,000 for construction, the bonds to be taken by a syndicate of banks, which will pay 95 per cent. of the face of the bonds. The bonds are to be payable in gold and will yield 5 per cent. interest. Provision is made for the syndicate to underwrite an additional \$1,000,000 if necessary, provided demand is made upon them before March 23, 1918. The bonds, which will be secured by mortgage on the lands, are to run over a period of 40 years and will begin to mature after the lapse of 10 years. Final plans include the expenditure of \$25,000,000, but no additional bonds will be sold until the board has demonstrated the earning power of the canal project on that basis.

Proceeds of the bond issue are to be deposited with local banks, and the sinking fund is also to be deposited with a 3 per cent. interest rate, but on the principal fund only 2 per cent. will be allowed after a given period. The Hibernia Bank & Trust Co. will be named as trustee.

Banks taking over the bond issue are: Hibernia, Interstate and Whitney-Central of New Orleans, the William R. Compton Investment Co. of St. Louis and the Halsey-Stuart Company of Chicago.

Because of the height of the levees and the rise and drop of the river it is not considered practical to build

riverside ways. Engineers have worked out a plan for securing tidewater levels by a canal leading to Lake Pontchartrain and connected by lock with the Mississippi River. Because of the character of the ground, the dredging will be comparatively cheap, and it is stated authoritatively that there will be no difficulty in getting the cement, steel and other material needed in construction. Engineers say the entire system can be finished within 15 months, but ships would be begun before then, for the launching basin and ways would be finished first, leaving the canal and the first vessel to be completed together.

### Rapid Construction of French Mine Sweepers at Savannah Shipyard.

The 36 mine sweepers for the French Government which will be built at the Savannah plant of the Foundation Company of New York city will be rushed to completion with unusual rapidity. These vessels, which will be built according to the Foundation Company's plans, will be of steel construction, for the most part of small plates, so as not to interfere with the steel ships being built for the United States Shipping Board. They will each be of the single-deck type, 150 feet over all, with a beam of 25 feet, and will have a speed of 11 knots; triple-expansion engines with water tubular type boilers will be installed. Contracts for the power equipment of all the vessels have been arranged for. The mine sweepers will also be equipped with wireless apparatus and will be armed.

The Foundation Company purchased 550 acres of land near Savannah for its shipyard. This property has a water frontage of 3000 feet. Nine shipbuilding ways are being built, and two ships will be constructed on each way, thus providing for 18 vessels under construction at one time.

As an indication of the rapidity of construction that will be followed, three of the vessels are scheduled for launching July 25, and these will be fully completed and made ready for sea by September 25. Three vessels will be launched every 10 days after July 25, making the last launching November 15, and the last ship under contract will be completed and sent to sea by January 15, 1919, which is an unusual record for quick construction. Altogether approximately 3000 men will be employed at the Savannah plant.

The Foundation Company has only been engaged in shipping work since the beginning of the war. Before that time the company specialized more in pneumatic caisson foundation work for all purposes, including buildings, bridges, mine shafts, lighthouses, dams, etc. About 1911 it entered into the construction of heavy manufacturing plants, such as steel works, chemical plants, nickel refineries and others along this line. With the outbreak of the war the company branched out into the building of munition plants, camp buildings and similar construction work.

During 1916 and 1917 the company built about 35 different plants, running in cost from \$100,000 to \$7,000,000, and its work included not only the completed design and construction of the buildings, but equipment as well.

The company has become especially active in shipbuilding work. It now has five yards, one at Victoria, British Columbia, where six 3000-ton wooden steamers are being built for the British Government. The first of these vessels was launched in 127 working days after the keel was laid. Also on the Pacific coast the company has plants at Portland, Ore., and Tacoma, Wash., and each of these have contracts for twenty 3000-ton wooden steamers for the United States Shipping Board.

The site of both of these plants on August 15 last was from 7 to 12 feet under water. By September 17 all of the necessary land had been reclaimed and work had been started on the construction of shipbuilding ways and necessary buildings. By October 27 all of this work had been completed and power was turned on and the first keel laid.

Today 10 hulls have been complete in each yard, and, starting about March 15, the company expects to launch vessels at the rate of seven a month in both yards. The necessary engines and boilers for all the vessels are completed and ready to go into the ships as soon as they are sent overboard. The fifth shipbuilding plant of the company is located at Newark Meadows, N. J., where a number of 3000-ton wooden steamers will also be built for the Shipping Board.

In addition to this extensive work, the Foundation

Company is now engaged in building two enormous electric power stations. One of these being constructed at Wheeling, W. Va., will have a capacity of 240,000 kilowatts, and this will be the largest power plant under one roof in the world. The other plant is being constructed at Cincinnati, O., and will develop 150,000 kilowatts.

In addition to the work referred to here, the company at this time is estimating upon a large volume of other important construction.

### \$1,000,000 FOR ADDITIONAL GALVESTON FACILITIES.

#### Drydock Costing \$850,000 and Accompanying Plants.

Galveston shipbuilding facilities will be augmented during the next seven months by a 10,000-ton floating drydock which the Galveston Drydock & Construction Co. will build at a cost of \$850,000, in accordance with a contract with the Government. The dock will be 600 feet long and 110 feet wide, which will accommodate all merchant vessels entering the Gulf. This dock will be constructed in two sections of 6000 and 4000 tons capacity bolted together, the pontoons to be of wooden construction, and the wings of steel. It will be operated in two sections, so that two vessels can be docked and repaired at the same time.

For the construction of this dock in the required time there will be needed 800 men, and for operating the plant after its completion 600 more will be required. The site is on Pelican Island, and the shipyard management's plans provide for expenditure of several hundred thousand dollars for additional improvements and accompanying facilities to include machine works, carpenter shop, repair plant, dredging, etc. William T. Donnelly of New York is the engineer who has designed this dock, his plans and specifications being ready for the commencement of construction as soon as the necessary materials and workmen have been assembled at the site.

The Government contract provides for the company purchasing the dock and completing payments in 4½ years after peace has been declared. In affording employment to 800 men during construction and to 600 after completion, this dock will add about 2000 people to the population of Galveston. This will naturally increase the general business activity of Galveston and its surrounding territory in the furnishing of homes and living supplies to the workmen and their families.

### Big Marine Contracts at Houston.

In connection with the construction of Government ships, the International Marine Iron Works of Houston is progressing with big contracts for marine machinery to be installed in these vessels. The company writes to the MANUFACTURERS RECORD:

"The International plant is on the water-front, with access to Houston's turning basin and ship channel; also on railroad with spurs in our yard, giving every facility for receiving and shipping freight of every character, water freight being handled direct to our plant by a 15-ton crane.

"Our plant is fully equipped with pattern shop, foundry and machine shop, in which we can turn out material of any size likely to be used in territory tributary to Houston. Our foundry superintendent, George H. Brown, formerly with the Allis-Chalmers Co., is thoroughly conversant with gray-iron and semi-steel castings made in green sand, dry sand and loam.

"As regards the work on hand, we have a contract from the Emergency Fleet Corporation for 88 semi-steel propellers. These propellers are being furnished for wooden vessels being built for the United States Shipping Board on the Gulf Coast. Our contract calls for casting and machining of these propellers complete. We are also making machinery equipment for eight steel ships, including eight 2000-horse-power marine engines, and under process of construction we have machinery for 40 wooden vessels. The above-mentioned steel and wooden vessels are being built by the International Shipbuilding Co., under authority from the Emergency Fleet Corporation."

## Advantages of Co-ordinated Effort, Based on Knowledge of All Details Shown in Work of Committee on Purchases for Allies.

[Special Correspondence Manufacturers Record.]

Washington, D. C., February 23.

While problems of production and distribution are exercising some of the governmental agencies to the utmost, there is one organization which is moving forward without friction to the complete satisfaction of the Allied powers now fighting in the cause of freedom. This sphere of co-ordinated action, with resultant benefits, is found in the purchasing committee of the Council of National Defense, headed by Bernard M. Baruch. This committee, which also includes in its membership Robert S. Lovett and Robert S. Brookings, is charged with the purchase of all raw materials for the Allied governments. A complete understanding to this effect was entered into by the Allied powers. The purchases were made for them all—England, France, Italy and the smaller Allied countries, and also Russia before the breakdown of the latter nation.

Some idea of the situation as it existed before the United States entered into the war is gained from a brief recalling of the methods that then prevailed. The allied nations were in the American markets for purchases. In their haste to secure supplies they bid frantically against each other. The result was the forcing up of prices to unheard-of heights, with a consequent demoralization of the industrial situation, and the threatened introduction of a speculative era that boded no good except to the speculators, and with the prospect that they themselves would eventually be caught in the general demoralization.

With the entrance of the United States into the war, Mr. Baruch became the unofficial Government agent in the procuring of raw materials. His activities soon took in the entire scope of war purchase of raw materials in this country. The Allied governments promptly recognized the wisdom of complete co-operation in purchases. They agreed to the definitely formulated system of a centralized purchasing agent. Baruch was selected both by President Wilson and Secretary of the Treasury McAdoo as the head of the purchasing committee.

Immediately there followed the adoption of a plan of voluntary price-fixing. The Federal Trade Commission first approached the question of justifiable prices by an exhaustive examination of costs of production. Taking up the details of a given industry, the commission studied its methods and processes. As a result of its investigations it arrived at what it considered the proper costs of production in that particular industry.

When the figures had been arrived at, those engaged in the industry were permitted to make their suggestions or protests. The question of prices was then taken up at the other end of the line, after a number of intermediate discussions and conferences by Mr. Baruch's committee.

After arriving tentatively at a satisfactory price, Mr. Baruch calls in the business men engaged in the particular industry, and talks the price over with them. In every case he anticipates certain forms of objection by his advance consideration of the principles under which business is conducted. He takes account of the necessity for a fair profit as an incentive to production. The factor of a fair wage for the workman also enters into the calculations. Even more important from the standpoint of combined production to the utmost is the case of the smaller plants, which, on account of overhead charges and less efficient working system, cannot compete with the larger plants. In other words, a given percentage of profits might result from a determined price at a plant where large operations cut the cost of production, whereas under the same price all profits would be wiped out for the smaller concerns. Mr. Baruch regards this factor as well.

Finally, the price is fixed. The business men engaged in the particular industry concerned are partners to the agreement. It is a voluntary agreement. The speculative feature is eliminated. Instead of dealing with the Allied representatives separately, having one bid against the other, they deal with the purchasing committee. There is the one market. There is also the one motive, that of victory for the powers of freedom. With the temptation removed, profiteering dies

of inanition. The big industries, swayed by patriotic motives, are protected in their patriotism. There is enough inducement for the slacker to get in line, by way of fair profits in view. Best of all, it has been proved that the slackers are few and far between.

The outcome has been a steady supply of the materials handled by Mr. Baruch and his committee for the needs of the Allies. Not a hitch has been experienced thus far. The Allied representatives in Washington are in constant touch with the purchasing committee. They state their requirements, and the purchases are made. The committee has gone even further by becoming a clearing-house for the Allies. When one has an excess of any form of supplies, and another a deficiency, a transfer is made.

This is the condensed account of the manner in which the purchasing system of the Allied governments has worked under the simple methods adopted by Mr. Baruch. Not only has there not been a hitch, but the most complete satisfaction has been encountered in every department concerned. The Allies get what they need; there have been no breakdowns in production through a slacking of effort on the part of the industrial leaders or troubles among the employees. The result most logically has been quantity production, which, after all, is to be America's biggest contribution to the war, despite the known and admitted value of the millions of fighting men who will join the forces of freedom at the front.

The statements here made are not of a haphazard nature. If there is a measure of generalization noticeable, the reasons are obvious. In the personal interview with Mr. Baruch by the MANUFACTURERS RECORD correspondent, figures and dates were freely mentioned, though not for publication. It can readily be understood that statistics of such a nature should be withheld. The propriety of caution in unnecessary disclosures in these particulars is more readily granted than in some other quarters where the "lid" is clamped down with no very apparent reasons. But it may be safely said that what the enemy doesn't know about war supplies sent expeditiously abroad will not do him any good. Suffice it to say that all of the statements here made are based on a free and frank discussion of his work with Mr. Baruch, backed up by copious references to collated statistics, and carefully kept minutes of the proceedings of the conferences held three times each week between the members of his committee and the representatives of the Allied Powers now in Washington. The absence of definite quotations is chargeable to Mr. Baruch's established rule not to be quoted. It may be added that his clarity of expression and aptness of illustration make the enforced necessity of using unquoted language all the more regrettable.

### Sloss-Sheffield's New President.

Birmingham, Ala., February 21.—[Special.]—The election of James William McQueen, vice-president, to the presidency of the Sloss-Sheffield Steel & Iron Co. is most pleasing to industrial circles in the Birmingham district and throughout the South. Mr. McQueen has been with the Sloss-Sheffield company in various capacities since 1891. He has been vice-president since 1902, in charge of sales. He is familiar with all the affairs of the company, financial and operating, and his many friends say that he will handle the new position with as much credit as he did in other offices with the company.

Born in Society Hill, S. C., in 1866, he came to Alabama when a boy. At 14 years he was working, and later on took position with the Alabama Great Southern Railroad (Southern Railway). He came to Birmingham in 1890, and a year later went with the Sloss-Sheffield Steel & Iron Co. He worked his way up through hard work and perseverance.

Mr. McQueen has considerable interests in and around Birmingham. Besides being a large property-owner, he is a director in the American Trust and Savings Bank. He is a member of all the social and civic clubs of the city, and belongs to the Episcopal church.



## "Hurst Remembers That Which Never Occurred," Says Edmonds

EDITOR COMES RIGHT BACK AT CRITIC IN GARFIELD CONTROVERSY.

[Daytona (Fla.) Journal.]

Richard H. Edmonds of Baltimore, editor of the MANUFACTURERS RECORD, came right back at Homer Hurst, who challenged Edmonds' criticism of Fuel Administrator Garfield and Secretary of War Baker, recently expressed in an interview with the Journal. Both of these gentlemen are enjoying life in Daytona for the winter.

Answering Hurst, Mr. Edmonds in a statement to the Journal yesterday said:

"In the Morning Journal today there is a criticism by Mr. Homer Hurst of some statements which I made in a recent issue of your paper in regard to Secretary Baker and Dr. Garfield, in which Mr. Hurst says:

"I recall that in one issue of his journal he published a list of Southern papers supporting Hughes, which was very misleading, as most, if not all, of these Southern papers had been supporting the Republican party for years. The only conclusion to draw from Mr. Edmonds' article is that it was intended to embarrass the Administration."

"I am afraid that the writer of that statement (unintentionally of course) has fallen into the habit of some people of remembering things that never happened. The MANUFACTURERS RECORD never published such a list as Mr. Hurst claims of Southern papers supporting Hughes.

### "Something That Never Happened."

"At the time when President Wilson and Congress, Democrats and Republicans alike, surrendered the nation to the Railroad Brotherhoods and permitted the threats of their four representatives to create a greater revolution than this country had ever seen, with Congress and the President practically turning over the machinery of the Government and the nation's honor to the bludgeon of four men, the MANUFACTURERS RECORD vigorously assailed this surrender, and it published extracts from many of the leading Democratic papers of the South, which with equal vigor assailed this surrender. Care was taken to publish extracts on the subject from the most widely known and powerful Democratic papers in order that the country might see that the Democratic papers of the South had independence enough to express their opinion in any great emergency, whether in doing so they had to criticize their own party or their own President, and these statements dealt with the surrender to the Brotherhoods, and not with Mr. Hughes.

### Aided Daniels.

"The habit of remembering things which never happened reminds me of a long letter which I received some months ago from a gentleman in North Carolina who bitterly assailed the MANUFACTURERS RECORD for criticising Secretary Daniels and hampering his work, something which had never happened, when, as a matter of fact, about the same time there came to me voluntarily an enthusiastic letter from Secretary Daniels expressing his appreciation of the great help that I had rendered him through the MANUFACTURERS RECORD in supporting his administration, and in fighting the Bethlehem Steel Corporation and other great interests in their effort to prevent the passage of the bill advocated by Daniels for the building of a Government armor plant.

"So far as I know the MANUFACTURERS RECORD was the only industrial publication in the country that from the beginning of that campaign to the end, unceasingly upheld Secretary Daniels, and fought those who were opposing the plan. Indeed, a very large amount of the information on which Secretary Daniels based his campaign was furnished by me directly to him and to Senator Tillman. But my North Carolina

critic had somehow mistakenly got it into his head, remembering things that had never happened, that I had been fighting Daniels.

### Thanked by President.

"Secretary Daniels and I have been intimate personal friends for 20 years or more, but I would just as quickly antagonize any mistake that I felt that he was making against the interests of the nation as I would antagonize anyone whom I had ever known. In discussing national affairs I know neither friends nor enemies, neither Republicans nor Democrats. Moreover, it so happens that I have a large number of appreciative letters and telegrams from President Wilson called forth by hearty commendation which I have given him for the things which I have felt deserved nation's endorsement. Some of these letters thanked me for information given in regard to national affairs.

"If Mr. Wilson were not big enough for his own friends to commend or to condemn, as in their judgment they saw best, every act which he commits as president, he would be entirely too small a man to be at the head of this nation, especially in this, the supreme hour of the world's civilization.

### The Case Against Garfield.

"Mr. Hurst commends Dr. Garfield. His unfitness for the position which he holds was shown in the fact that when he was appointed to that place he announced that the coal situation 'was merely a psychological one,' and warned the public not to buy coal until he had set the price, and every move which he made for months was in keeping with those two foolish blunders. Every intelligent man in the country who had cared to study the situation knew from the winter of 1916 that the coal situation was becoming intensely acute and that this winter would bring forth a very desperate situation. Any man who did not know that was not at all in touch with the great influences at work to hamper coal production and distribution at a time when unprecedented activity in iron and steel and munition plants was making an enormous demand for coal, and when the non-coal producing countries of the world, who had formerly depended upon Great Britain for their coal supply, were now asking us to meet their coal needs. Dr. Garfield may be a great psychological expert, a great sociological leader, a great college president, but the ignorance which he displayed in regard to the coal situation was so lamentable as to amaze intelligent people.

"Secretary Lane, who is certainly the business equal of any man in the Cabinet, last year brought about a conference with the coal operators of the country, and secured from them a voluntary agreement to reduce the price of coal at the mine from an average of about \$5 to \$6 per ton for bituminous coal to \$3 a ton. At the close of this meeting Secretary Lane made a speech which he sent broadcast through the country, in which he said:

"I think I am within the fact when I say that no such hearing or gathering as this has ever been held in the United States before or perhaps in the world. You have responded as men should to the call made upon you in the name of the people of the United States. I think you have reason to be proud of what you have done. Speaking for Governor Fort and the committee and myself, we are proud of what you have done."

"Within two days Secretary of War Baker, by virtue of his position as president of the Council of National Defense, issued a statement denouncing the very action which Secretary Lane had brought about and so highly commended, and though Secretary Lane's statement had been given to the press and widely distributed by him, Secretary Baker issued a statement in which he said:

"The color which has been given to this meeting in the newspapers may well mislead the public in the

belief that the Council of National Defense has undertaken to sanction the fixing of a coal price by the Coal Production committee. I, therefore, as president of the council write this to say that such action is clearly beyond the legal power of the Coal Production committee."

### Lane Insulted by Baker.

"Mr. Baker also said: 'My attention has been called through the newspapers to the action reported to have taken place during the last week by the so-called committee of coal production, etc.'

"As Secretary Lane was responsible for that meeting, and praised the coal operators for their patriotism, and as a member of the Trade Council was associated with him in the matter, and as he officially gave this statement to the newspapers, I have never been able to understand how, except from a spirit of limitless patriotism, Secretary Lane has been able to remain in the Cabinet with Secretary Baker, after receiving so deliberate an insult.

"If your correspondent was at all familiar with conditions which have prevailed in the training camps, with which, unfortunately, President Wilson is not personally familiar, if he remembered that F. A. Vanderbilt, head of the Stamp Savings Committee of the Government, recently said that in a camp which he had visited there were 1600 patients in the hospital, and 200 of them had no beds on which to sleep, and if he had known that inefficiency of this kind exists at other camps and in the supply of munitions and of guns, he would probably recognize that the highest patriotic duty of those who know these facts is to make them public, regardless of who is helped or hurt."

### United States Steel Corporation Subsidiary Companies Organized for Shipbuilding and Other Activities.

Birmingham, Ala., February 25—[Special.]—In order to establish identity of the developments at Fairfield, adjacent to Ensley, and at Mobile, subsidiary organizations of the Tennessee Coal, Iron & Railroad Co., which is itself a subsidiary to the United States Steel Corporation, articles of incorporation of four distinct corporations have been filed in the probate office in Birmingham, the general headquarters of each company being here. The capitalization of each company is \$50,000, and the same officers are announced for each, as follows: George Gordon Crawford (president of Tennessee Coal, Iron & Railroad Co.), president; H. C. Rydall, vice-president; L. T. Beecher, secretary-treasurer. Other incorporators are F. B. Winslow and Augustus Benner. The incorporations are Fairfield Steel Co., Chickasaw Shipbuilding Co., Chickasaw Land Co., Chickasaw Utilities Co. The first-named company will build or acquire a steel plant to manufacture steel for shipbuilding; the shipbuilding company will erect or acquire a plant to build ships; the land company will do a general land business around the shipbuilding plant; the utilities company will erect or acquire an electric-light, power, heating and steam plant and construct a street railway line to connect with the Mobile street-railway system. The incorporators are legalizing or identifying organizations set on foot some time ago. Great progress is noted in all four organizations. The foundations for the Fairfield development are nearing completion, and the American Bridge Co., which has the contract for the buildings, will begin on the actual erection of the structures the coming week.

### Large Expansion of Louisiana Syrup Industry.

New Orleans, February 22—[Special.]—Penick & Ford, Inc., distributors and packers of Louisiana molasses and syrup, have just announced a doubling of their capital stock from \$1,000,000 to \$2,000,000.

This increase was made to prepare for the large expansion of the Louisiana molasses and syrup trade which is predicted to follow the greater development of Louisiana's sugar business already taking place.

Other Louisiana syrup plants are also increasing their capitalizations, and several old-time sugar factories have decided to make syrup this year instead of sugar. The syrup factories of Louisiana, like the sugar and rice mills, will be thoroughly renovated before the next syrup crop.

## Revised Prices and Differentials on Steel Scrap Announced by Judge Gary

REVISED PRICES AND DIFFERENTIALS AFFECTING IRON AND STEEL SCRAP HAVE BEEN ANNOUNCED ON STEEL AND STEEL PRODUCTS AMERICAN IRON AND STEEL INSTITUTE, EFFECTIVE FEBRUARY 21.

In Judge Gary's statement it is related that "an announcement was made on November 5, 1917, with the approval of the President of the United States, fixing the maximum base prices on iron and steel scrap as follows:

No. 1 heavy melting.....\$30.00 per gross ton  
No. 1 railroad wrought..... 35.00 per gross ton  
Machine-shop turnings and cast-iron borings..... 20.00 per gross ton  
All delivered to consumer's mill.

"On December 28, by the authority of the President, these base prices were continued operative until March 31, 1918.

"By this announcement it was intended that no one—either producer, consumer, merchant or broker—should buy, sell or deal in scrap iron and steel at any figure in excess of the base prices announced.

"On December 27 the chairman of the committee on steel and steel products of the American Iron and Steel Institute announced differentials on iron and steel scrap, which are hereby cancelled, together with any interpretations subsequently announced. On and after this date the following differentials as recommended by the sub-committee on scrap iron and steel, and approved by the committee on steel and steel products, shall be in effect:

No. 1.—'No. 1 Heavy Melting Steel'...Base Maximum \$30.00

No scrap to be used for remelting into steel shall be dealt in at a price in excess of the maximum base. This shall include all steel, wrought iron, cast-iron car wheels, malleable scrap or other grades to be melted in basic open-hearth furnaces (except as noted in Clauses 2, 3 and 4).

No. 2.—Low Phosphorous Steel Scrap.

(a) To be used only in plants operating acid open-hearth furnaces, crucibles or electric furnaces. This grade, which shall consist of billet, bloom, bar and plate crop-ends, axle butts and new mill plate shearings  $\frac{1}{4}$ " thick and heavier, no piece to weigh less than 10 lbs., all in charging-box shape and which will analyze .04 and under in both phosphorus and sulphur, may be dealt in at a differential of not exceeding \$10.00 per ton over the base price of heavy melting steel.

Maximum \$40.00

(b) All other grades of low phosphorous steel scrap to be used in such plants, which will analyze .04 and under in both phosphorus and sulphur, may be dealt in at a differential of not exceeding \$7.50 per ton above the base price of heavy melting steel.....Maximum \$37.50

(c) Special steel for use in such plants, but which will not analyze under .04 in phosphorus and sulphur, may be dealt in at a differential of not exceeding \$5.00 per ton above the base price of heavy melting steel. Such special steel shall include steel knuckles and couplers, rolled steel wheels, railway steel springs, carbon tool steel and similar material in quality and character, suitable for mills of this kind.....Maximum \$35.00

Note.—Material under this classification may not be dealt in for use by basic open-hearth plants using charging boxes at a price in excess of the maximum allowed for heavy melting steel (\$30.00).

No. 3.—Steel Rails, Structural Steel or similar scrap which has been especially sheared to short lengths for use in cupolas, hand-charging furnaces or for re-rolling purposes may be dealt in at a differential of not exceeding \$5.00 above the base price of heavy melting steel.....Maximum \$35.00

Note.—Materials under this classification may not be dealt in for use by basic open-hearth plants using charging boxes at a price in excess of the maximum allowed for heavy melting steel (\$30.00).

No. 4.—Standard section old steel tee rails, free from frog, guard and switch rails, 56 lbs. per yard and heavier, 5 ft. and over in length, suitable for and to be used only for re-rolling purposes, may be dealt in at a differential of not exceeding \$5.00 per gross ton over the price of heavy melting steel.....Maximum \$35.00

No. 5.—Nickel Steel.

Nickel steel scrap, excluding turnings, and containing not over one-half of 1 per cent. of chrome, may be dealt in at the maximum price of heavy melting steel plus a differential of not exceeding \$4.00 per ton per unit on the nickel content.

No. 6.—'No. 1 Railroad Wrought'.....Maximum \$35.00

(a) No. 1 railroad wrought scrap may be dealt

in at a price of not exceeding \$35.00 per gross ton.

(b) When wrought scrap is especially sheared or prepared for piling or fagoting purposes to lengths of not under 10" or over 24", it may be dealt in at a differential of not exceeding \$5.00 per ton over the base price of No. 1 railroad wrought, but this may not include short wrought or other material which has not been especially prepared.....Maximum \$40.00

(c) Wrought-iron railroad angle or splice bars, iron or steel shafting, suitable for re-rolling, old iron rails, iron boiler-plate cut apart in sheets and rings, wrought-iron bridge scrap cut apart and similar wrought-iron suitable for making sides and bottoms for box piling, may be dealt in at a differential of not exceeding \$5.00 over the base price of No. 1 railroad wrought,

Maximum \$40.00

(d) No. 1 yard wrought, railroad-track scrap and short wrought, also wrought iron and steel pipe, when 1" and over in diameter, 2 ft. and over in length, free from dirty, painted, enameled or coated and bent material, may be dealt in at a maximum of \$1.00 per ton under the base price of No. 1 railroad wrought.....Maximum \$34.00

(e) The commodity known in the trade as No. 1 busheling scrap, when suitable for and to be used only by mills manufacturing bar iron, may be dealt in at a maximum of \$3.00 per ton under the base price of No. 1 railroad wrought,

Maximum \$32.00

(f) Ungraded wrought iron and steel pipe and tubes, steel boiler-plate cut apart in sheets and rings, country wrought and soft steel mixed, may be dealt in at a maximum of \$5.00 under the base price of No. 1 railroad wrought scrap,

Maximum \$30.00

No. 7.—Iron and steel railway axles, arch-bars and transoms, old locomotive tires smooth inside and sheet bar crop-ends, when suitable for and to be used only for re-rolling purposes, may be dealt in at a differential of \$12.50 per ton over the base price of No. 1 railroad wrought.....Maximum \$47.50

No. 8.—Cast-Iron Scrap.

(a) All cast-iron scrap, whether broken or unbroken, including unbroken cast-iron car wheels, may be dealt in at a maximum price not exceeding that of heavy melting steel, except as noted in Clause b.....Maximum \$30.00

(b) Cast-iron scrap in cupola shape, in pieces not exceeding 150 lbs., including broken cast-iron car wheels, when suitable for and to be used only in cupolas or in puddling furnaces, may be dealt in at a differential of not exceeding \$5.00 per ton over the maximum price of heavy melting steel,

Maximum \$35.00

(c) Malleable scrap of all kinds may be dealt in at not exceeding the maximum price of heavy melting steel (exception as noted in Clause d),

Maximum \$30.00

(d) Malleable scrap in cupola shape, in pieces not over 150 lbs., when suitable for and to be used only in malleable works, may be dealt in at a differential of not exceeding \$5.00 per ton over the maximum price of heavy melting steel,

Maximum \$35.00

Note.—Cast-iron scrap or malleable scrap of any description may not be dealt in for use by basic open-hearth furnaces at a price in excess of the maximum allowed for heavy melting steel (\$30.00),

Maximum \$30.00

No. 9.—'Machine-Shop Turnings.'

(a) The term 'machine-shop turnings' shall apply to all grades of iron or steel turnings except as noted in Clauses b and c.

(b) Heavy axle and forge turnings, or their equivalent, may be dealt in at a price of not exceeding \$5.00 per ton over the maximum price of machine-shop turnings.....Maximum \$25.00

(c) Nickel steel turnings containing not over one-half of 1 per cent. of chrome may be dealt in at a price of not exceeding \$5.00 per ton over the base price of machine-shop turnings, plus a differential of not exceeding \$4.00 per ton per unit on the nickel content.....Maximum \$30.00

No. 10.—'Cast-Iron Borings.'

This classification shall cover all grades of cast-iron borings (except for the special purpose indicated in Clause a).

(a) Cast-iron borings and steel turnings, when suitable for and to be used only by chemical plants or plants operating for purposes other than the remanufacture into iron or steel products, may be dealt in at a differential of not exceeding \$5.00 above the base price.....Maximum \$25.00

"The above prices are the maximum which may be

paid; buyers and sellers may contract at any price below the figures named.

"All the above prices and differentials are per gross ton of 2240 pounds, and in all cases include all freight and charges delivered f. o. b. cars at the consuming mill. For further information communicate with F. Vernon Phillips, chairman, sub-committee on scrap iron and steel, American Iron and Steel Institute, Pennsylvania Building, Philadelphia, Pa."

### West Virginia to War on Rats.

A campaign to destroy rats and mice in West Virginia is to begin March 4 on the initiative of J. H. Stewart, commissioner of the State department of agriculture. As a war measure, Mr. Stewart points out in a circular he is distributing the country is overlooking the rat while establishing meatless and wheatless days and otherwise enjoining the conservation of food. The enormous destructiveness of the rat is so serious that it constitutes the greatest single source of food waste. Mr. Stewart points out that "they are the most hurtful of all pests of humanity," and he continues:

"They are a nuisance. They are ubiquitous and omnivorous. They purvey diseases, destroy property and consume and waste enormous quantities of human food. They cause more damage than flood, fire and pestilence. The aggregate injury and waste caused by them amounts to many millions of dollars per year, probably \$500,000,000 for the nation. It is a conservative statement that the ultimate injury caused by them in West Virginia will exceed by far the total contributions by our people for Liberty bonds, Thrift Stamps, Red Cross funds, Salvation Army funds and the maintenance of the State Executive Council of Defense.

"In view of our war necessities and our effort to make our nation stronger, certainly this is a matter of serious consideration and worthy of everyone's attention.

"There is no source of waste and injury like this, and no scheme for conservation will be so potent as to wipe out this pest. If everyone will join heartily in the undertaking, it will be worth millions to the State and be of incalculable benefit to us all.

"Rats breed from six to ten times a year, with an average of 10 young each time. National biologists have estimated that a single pair of rats, if undisturbed, will multiply to 37,000,000 in two years.

"The importance of this subject will be pressed upon the attention of everyone in the State.

"Farmers, school children, Boy Scouts, millers, merchants, citizens, should all take a hand in it."

### January's Poor Showing in Coal Production.

Washington, D. C., February 25—[Special.]—Facing a fuel need greater than at any time in the history of the country, the January, 1918, coal production fell behind the mark set for the same month in 1917 by 5,000,000 tons. In a statement just made public by the United States Geological Survey, the daily average of bituminous coal production during January is shown to be even smaller than during the slump of December, 1917, owing to the fact that there were 26 working days, as compared with 25 in December. There was a net gain of 57,000 tons in the production of 42,727,000 tons for the month, but the daily average amounted to but 1,643,000 tons, as compared with 1,686,000 in the preceding month.

The Geological Survey records show that the rate of bituminous production during the first month of the year was lower than at any time since September, 1916, the weather conditions and unprecedented transportation congestion being held largely to blame.

The January production of beehive coke is estimated at 2,339,000 tons, an average of 89,972 tons per working day, which is a decrease of 7000 tons in the record of the previous month. By-product coke production amounted to but 1,633,000 net tons, or 72.4 per cent. of the maximum capacity, reflecting the restriction in the bituminous coal and beehive coke production.

The severe weather most seriously affected the producing areas in Central Pennsylvania, Maryland, West Virginia, Kentucky, Indiana and Illinois. Western Pennsylvania, Ohio, Michigan and the Rocky Mountain States equaled the output in carloads of bituminous coal for the corresponding period in 1917, and Alabama, Tennessee and Georgia showed a gain of 8055 carloads over the same period in the previous year.



# Petroleum Production in Texas

## Over 5,000,000 Barrels Increase for 1917

[Special Correspondence Manufacturers Record.]

Houston, Tex., February 19.

The total production of crude petroleum in Louisiana and Texas for 1917 was 44,441,295 barrels, an increase of 1,563,505 barrels over 1916. In 1917 Texas produced 33,106,395 barrels, and Louisiana 11,334,900 barrels. In 1916 Texas produced 28,082,570 barrels, and Louisiana 14,795,220 barrels, an increase in Texas production of 5,023,825 barrels, and a decrease of 3,460,320 barrels in Louisiana.

Nearly two-thirds of the 1917 production in Texas came from South Texas, which had a total of 22,083,420 barrels. North and Central Texas produced 11,022,975 barrels, an increase of 1,067,415 barrels over the amount in 1916.

Of the total Louisiana production for 1917 North Louisiana produced 8,368,025 barrels, and South Louisiana 2,966,875 barrels.

These figures do not represent the actual pipe-line runs, nor the quantity of crude petroleum marketed, but include the total production of each district based upon monthly reports, which include pipe-line runs, oil used for fuel in drilling and operating leases and sold by independent producers to small consumers. These estimates will be found to run about 5 per cent. higher for each district than the figures published in the United States Geological Survey.

The districts composing the Southern fields in both States are commonly known as the Gulf Coast division. This division furnished 25,050,925 barrels of the total amount produced in the two States for the year 1917, an increase of 3,202,180 barrels over 1916. Of the total amount, the South Texas pools produced 22,083,420 barrels, and South Louisiana 2,966,875 barrels for 1917, an increase of 4,056,410 barrels for South Texas over the amount produced in 1916, and a decrease of 854,230 barrels for the South Louisiana districts.

At the beginning of the year 1917 interest centered in South Texas in the Goose Creek district, which had brought in its first gusher a few months before. During the summer all eyes turned to Damon Mound, also in the South Texas division. At the close of the year prospectors were turning their attention to Central Northwest Texas, interest centering chiefly in Stephens, Eastland, Palo Pinto, Brown and Coleman counties. Late in December the Texas Company brought in a 10,000-barrel gusher in the eastern extension of the Pine Island district, east end of the Caddo field, North Louisiana.

A strike of the oil-field workers in both the Gulf Coast division and North Louisiana during the closing months of the year greatly retarded development for a few weeks. At the close of the year operators were waiting to ascertain the attitude of the Government towards Government control, and were looking for better prices of crude. This was especially true in the Gulf Coast region, where operators declared they could not afford to drill for increased production without an increase in the price.

Drilling was active in the Gulf Coast division throughout the past year, Goose Creek leading in matter of new production and number of tests drilling. The increase in production for the year in the coastal belt was principally due to the showing Goose Creek made, which produced 7,023,270 barrels for the year. All the other districts, with the exception of Spindletop, showed a decrease in production for the year. Humble declined 3,207,110 barrels from the amount it produced in 1916. Even with that decline the field produced 7,115,160 barrels for the year 1917, almost as much as Goose Creek in its most prosperous and active era. Large wells in the gusher class were completed in the Goose Creek field throughout the year, but many of them did not hold up, the wells in the Humble field, as a rule, holding up much longer, which has enabled that field to maintain its relative production without any great number of large new completions. This field was especially active in the shallow section of the field.

While good wells were found in South Louisiana, all

fields showed a decline for the year in the matter of production and activity in drilling operations.

At the close of the year some good pumpers of 200 barrels had revived drilling in the Spindletop field.

Wildcatting was active throughout the year in all sections of the Gulf Coast. As a result, a new field was discovered at Damon Mound. The Texas Exploration Co. brought in a 5000-barrel gusher in this district in May. Later in the year the same company brought in another of the same caliber, and several good pumpers were completed by the close of the year, but the field had not come up to expectations, although there was considerable activity, with about 30 rigs running, some of the tests being down 3400 feet. The discovery well was completed a little below 1400 feet. The field is freakish; oil discovered at one depth may be entirely absent in another test put down but a few feet from it, or be discovered at a much greater depth. The total production of the Damon Mound field from the time of the discovery to the close of the year was 494,710 barrels. This field is in Brazoria county, Texas, and at the close of the year this county was attracting considerable attention following the bringing in of a 200-barrel flowing well at West Columbia by the Tyndal-Wyoming Oil Co. Another spot in Brazoria county being watched closely was Rattlesnake Mound, where Wallace, Gibson & Zahnizer have spent, to date, \$115,000 wildcatting, and on their third test, oil having been encountered at several depths, they junked the holes from losing tools.

Prospecting for sulphur was especially active in the South Louisiana district, also for gas in the Terrebonne district, where several monster gas wells had been discovered.

In North Louisiana drilling operations were uninteresting for most of the year. Some excitement followed the finding of a well in Bossier parish, northeast of old production in the Caddo field, during the summer, but results were disappointing, the tests going to water. But in December the Texas Company brought in a gusher in the eastern extension of the Pine Island district, east end of the Caddo field, that had an initial production of 10,000 barrels. At the close of the year it was producing 3000 barrels of heavy oil, 26-degree Beaume scale.

In the North and Central Texas division the Electra district produced more than half of the total output for the year, contributing 6,070,305 barrels, which was 393,075 barrels less than this district produced in 1916. The Burk Burnett district showed an increase of 1,497,160 barrels for the year 1917, having 3,585,185 barrels to its credit, against 2,088,025 barrels in 1916. The increase for the past year was principally due to flush production of the Humble Oil & Refining Co. on Schultz and Serrien leases. In the Electra district drilling at Culbertson was not very satisfactory, as the territory proved to be spotted, with few good wells and many dry holes. Southeast of Electra considerable new production was developed at Sunshine Hill, where about 20 rigs were running at the close of the year, developing the shallow pay around 600 feet, the wells averaging about 50 barrels initial production.

At the close of the year interest in North Texas centered chiefly in Stephens, Palo Pinto, Eastland, Brown and Coleman counties. In Eastland county, near Ranger, the Texas & Pacific Coal Co. completed a well late in September on the McCloskey ranch at 3427 feet, which started off with 12,000 barrels initial production, and at the close of the year was making better than 13,000 barrels. This is a remarkable well, as it was drilled only four feet in the pay. What it would do if drilled deeper is problematical. Another important well is No. 3 Morris of the Magnolia Petroleum Co. in the northeast corner of Coleman county, which found a pay at practically the same depth with the same formation as the Ranger well, oil in both testing about 40 degrees gravity Beaume.

As it is about 50 miles between the two wells, it would seem to indicate a scope of considerable territory that is favorable, geologically, for both oil and gas. Geologists have mapped about 10 counties in Cen-

tral Northwest Texas which they consider as favorable for the finding of oil. This territory comprises about 15,000 square miles. There are a number of different producing horizons in this section. At Brownwood, in Brown county, probably 500 wells in shallow sands have been completed within the last three months of the year, with a combined potential production of 25,000 barrels a day.

### Electrochemical Society to Visit the Appalachian South.

At a recent meeting of the board of directors of the American Electrochemical Society it was decided that the spring meeting would be held in the Appalachian South. This meeting will be in the nature of a tour, and as now planned will leave Washington on April 28 and will make the following points: Kingsport, Tenn., April 29; Knoxville district, April 30; Chattanooga, Tenn., May 1; Muscle Shoals, May 2; Birmingham, Ala., May 3, and returning to Washington May 5. So far 81 members of the society have agreed to make the trip, and it is anticipated that before the departing time arrives a number of additional members will go.

The desire to investigate the resources of the Appalachian South suitable for electrochemical industries was determined upon primarily as a result of the participation of Southern railroads in the last National Exposition of Chemical Industries in New York. At this exposition these railroads showed the extensive resources and peculiar advantages of the Appalachian South suitable for this class of industry, and it is for the purpose of investigating these resources at first hand that the society will make the trip outlined.

For the purpose of arranging the tour a committee has been appointed, having as chairman Charles F. Roth, manager of the National Exposition of Chemical Industries, and the following members: W. H. Warmley, vice-president Alabama Power Co., Birmingham, Ala.; Blanks Everett, general manager, Chamber of Commerce, Birmingham, Ala.; R. E. Brakeman, Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.; Col. J. W. Worthington, Sheffield, Ala.; C. H. Howard, chairman Chattanooga Industrial Board, Chattanooga, Tenn.; V. V. Kelsey, industrial agent Carolina, Clinchfield & Ohio Railway, Johnson City, Tenn.; J. H. Watkins, Southern Railway, Washington, D. C.; W. H. Stone, MANUFACTURERS RECORD, Baltimore, Md. In addition to these, all the members of the society in the States of Kentucky, Tennessee, Alabama, Georgia, Virginia, North Carolina and South Carolina will be ex-officio members of the arrangement committee.

### Efforts to Foster Sheep Raising in Kentucky by Eliminating the Worthless Cur.

Whitesburg, Ky., February 24.—[Special.]—For years Eastern Kentucky farmers have been menaced in sheep raising by worthless dogs, and as a result the industry has been lagging. An estimate shows that there are five dogs to one sheep, or an average of from two to three dogs to each family; and perhaps one sheep to every three families — this condition prevailing throughout the whole of the mountainous section of the State, where the sheep-raising industry would net splendid returns—in fact farmers could not engage in a more remunerative industry. When understood, the conditions are exasperating, for it requires more than double as much to maintain a dog as it does a sheep.

Hundreds of interested farmers are making a strong effort to show conditions as they are, and delegates are appearing before the present General Assembly urging its members to agree on laws that will eliminate worthless dogs.

It is proposed to make the tax anywhere from \$5 to \$10 on each dog, instead of the present \$1 tax; also making it a heavy fine for owners of dogs to fail to list them for taxation. Under the present law thousands of owners of dogs manage to evade listing them, and never pay a penny of taxes. Strong delegations are urging the General Assembly on this important legislation—delegations from every nook and corner of the State. If favorable action is taken the sheep-raising industry will ultimately come to the front rank in the State. The Blue Grass, the "Pennyrile" and the Purchase, as well as the mountains, are urging laws to put the worthless dog out for all time.

### DEVELOP MINES TO SAVE SHIPS.

Franklin K. Lane, Secretary of Interior, Recommends Government Aid to That End.

A plan to save approximately 1,500,000 tons of cargo space a year and thus make available more ships for the carrying of troops and supplies to Europe has just been suggested by Franklin K. Lane, Secretary of the Interior Department, who says that three-fourths of our importations of minerals, amounting to 2,000,000 long tons per annum, can be saved by adopting a policy of aiding the development of American mines. In this work the South, with its wealth of mineral resources covering the entire field named by Secretary Lane, would be called on to play an important part. But more than the mere saving of ship space would be accomplished, according to the Secretary, because many of the imported minerals come from distant countries, involving long voyages and many delays in loading, so that considerable saving of time would also be made by fully developing our own mines producing these things. Moreover, importation of bulky minerals congests our ports and exhausts our credit in buying abroad. Furthermore, we have to furnish fuel, equipment and supplies to the foreign mines, and we also have to transport thither other products which such countries demand in return for the minerals.

"The minerals to which I refer," said he, "are the most important for the manufacture of munitions, the two fundamentals for high-power explosives being nitrate, chiefly as nitric acid, and concentrated sulphuric acid made from pyrites or sulphur. Manganese is also a most essential alloy for high-grade steel for munitions and other important industrial uses. Then there is flake graphite for crucibles needed to produce brass and crucible steel. Tin is required for tinplate utensils and cans and for bearing metal. Mercury is used for fulminate to explode cartridges and shells, and it is essential for the safe and effective use of all high explosives. Potash is used chiefly for fertilizer, although smaller amounts of it are employed in explosives, soap, glass and chemicals. Tungsten is essential as an alloy for high-speed steel and antimony is needed to harden lead and bullets, chromite for alloy in armor plate, armor-piercing projectiles, tool steel, and for lining open-hearth steel furnaces, magnesite also as a refractory in metallurgical plants, and mica for insulating electrical apparatus.

"American mines can produce all of these minerals, providing they are given the necessary assistance of the Federal Government. I have therefore asked Congress to make a special appropriation so that a large force of metallurgists can be set to work immediately on the necessary changes in practice to use lower grade manganese ores. Field parties of engineers and geologists must take samples for quick concentration tests to improve the quality of the domestic materials. Many new mines must be developed at once. The Bureau of Mines has already completed a survey of the pyrite mines of the country and of the principal sulphur deposits. The principal technical work essential to these problems has been laid out, but it is partially stopped through lack of funds."

Mr. Lane has also further outlined what must be done to bring about the mineral development desired with relation not only to sulphur, but to nitrate, pyrites, chromite, graphite, tungsten, quicksilver, etc., saying that the sooner the technical investigation required preliminary to the mineral development is undertaken, the sooner will the ships be released for war purposes.

### Marked Improvement in Coal and Coke Production.

Production returned almost to normal during the week ended February 16, according to the weekly report of the Geological Survey. The total bituminous output, including lignite and coal made into coke, is estimated at 11,084,000 net tons, nearly 1,000,000 tons greater than in the preceding week. The average production per working day was 1,847,000 tons, as compared with 1,753,000 tons, the daily average for February of last year. The performance per working day was better than at any time since early December, except during New-Year's week. Indeed, because New-Year's week

contained but five working days, last week's total production exceeded that in any week since December 8.

Beehive coke shared in the recovery experienced by the bituminous industry as a whole. The total production for the week is estimated at 557,000 net tons, an average per working day of 93,000 tons.

For the country as a whole the ratio of coal tonnage produced to full-time capacity was 64.4 per cent. during the week ended February 9, as compared with 60.0 per cent. during the preceding week. Losses attributed to car shortage decreased slightly, from 29.2 per cent. during the preceding week to 27.7 per cent. The cessation of flood conditions in the high volatile fields of Southern West Virginia and in the Southwestern Virginia coal field caused losses due to mine disability to return to normal.

The increase in production which marked the week of February 9 was effected in central Pennsylvania, in the Winding Gulf and Pocahontas and New River fields of West Virginia, in the high-volatile fields of Southern West Virginia and in the Southwestern Virginia district. Little change was reported from the Middle West. Production in Ohio remains at less than one-half of capacity. In that State and in Western Pennsylvania, the Irwin gas fields, the West Virginia Panhandle and in the Fairmont and Junior-Phillipi districts of West Virginia conditions changed for the worse.

During the week of February 16 production in the Connellsville and adjacent districts of Pennsylvania shared in the recovery experienced by the bituminous industry as a whole. Sixty-two of the principal operators reported a production of 229,040 net tons, or 53.2 per cent. of their capacity as rated by the railroads. Although the improvement was affected by a reduction in losses due to lack of coke cars, shortage of cars remained the dominant factor limiting production. Losses attributed to that cause amounted to 34.4 per cent. of the rated capacity; those due to shortage of yard labor to 7.9 per cent. The same operators shipped 150,350 tons of coal, 35.7 per cent. of their combined rating as coal producers.

The production of by-product coke was 381,973 net tons, an increase of 14,298 tons over the preceding week and 15,900 tons over the week of February 2. The improvement was general.

### Foreign Trade in January.

January imports were valued at \$235,000,000, an increase of \$7,000,000 over December, but exports showed a falling off of \$80,000,000 from the very high figure of \$584,000,000 recorded for December.

According to a statement issued today by the Bureau of Foreign and Domestic Commerce, Department of Commerce, the imports for the seven months of the fiscal year ended with January were valued at \$1,634,000,000, as against \$1,348,000,000 for the corresponding period of the previous year. Exports for the seven-month period totaled \$3,448,000,000, as compared with \$3,616,000,000 for a similar period the year previous.

Gold imports in January were \$4,404,000, and for the seven-month period \$78,694,000. Exports were valued at \$3,746,000 in January and at \$41,186,000 for the seven months ended with that month.

The imports of silver in January totaled \$5,997,455, and for the seven months \$41,186,000. Exports in January were valued at \$6,628,000, and for the seven months ended with January \$52,032,000.

### New Gushers in Texas Gulf Coast Field.

Humble, Tex., February 20.—[Special.]—An 8000-barrel oil well of the gusher type has been brought in by the Producers' Oil Co. in this field. It is the largest producer that has marked the oil operations in the Gulf coast fields for some time, and it lends material encouragement to the prospects of a very large increase in the crude petroleum output being obtained in the near future. The new well tapped the deeper oil strata of the Humble field, the development of which is giving a new lease of life to this field. Not far from the site of the 8000-barrel well is another well which was brought in six months ago with a daily flow of 3000 barrels.

In the Goose Creek field a 3000-barrel well has just been brought in by the Texas Company. Other wells that give an output of about 250 barrels per day by means of pumping have recently been brought in in the same field.

### WASTE WOOD FOR FUEL.

Witte Engine Company Makes Pertinent Suggestions Looking to Coal Saving.

The Witte Engine Works, E. M. Tucker, secretary and manager, Kansas City, Mo., in a letter to the MANUFACTURERS RECORD makes several pertinent suggestions concerning the campaign of the United States Fuel Administration to have wood used for fuel in place of coal wherever wood is to be had. Among other things, the letter says:

"It is our estimate that most of the towns, particularly the smaller cities, as well as the farms in at least 25 of the States, can utilize wood for fuel," and this, it is further said, would result in the removal of driftwood and useless trees from creeks and rivers, which would prevent considerable flooding of lowlands which have great food-producing value. Worthless timber lands should be cleared, especially where the wood has no value except for fuel, the land being then used to raise crops for food, thus reclaiming millions of acres. Other forests ought to be thinned by removing surplus trees, undergrowth, etc., so that sunlight could enter and increase pasturage, relieving open land pasturage, which might then be employed for crops. Instead of saving 10,000,000 tons of coal a year, the company thinks that this would save 20,000,000 tons and avoid closing factories next winter owing to fuel shortage.

To pursue a plan like this, it is also remarked, would develop sundry lines of local industry to the benefit of numerous communities and individuals. Besides, in getting out fuel wood there would be much incidentally gathered suitable for fences and building lumber. Light power rigs, to be operated by not more than three men, would do the work of 50 men without such equipment, and the cost would be less than \$400. Delivery of sawing equipments is the only serious factor in the proposition.

### Increased Rice Acreage Indicated.

New Orleans, February 22.—[Special.]—Rice plantings and preparations for rice planting have progressed far enough by now to indicate that there will be a large increase this year in the acreage in rice in the rice districts of Louisiana, Texas and Arkansas.

Officials of the Louisiana State Rice Milling Co., which is the largest rice concern in the United States, stated this week that all signs pointed to wonderful American rice progress in 1918. They said that it was impossible now to say just how much larger the 1918 crop will be, but that within a month they would be able to fix the approximate percentage.

All of the existent rice mills will undergo more or less substantial machinery and other improvements this spring and summer, and large sums will be expended for the volume of general construction contemplated in the rice belt cities and towns.

The rice districts, like the Louisiana sugar district, have enjoyed unprecedented prosperity in the last year, and present prospects presage greater prosperity this year.

Milling operations with 1917 rice are practically over now, and the season for repairs and reconstruction work on the mills is just beginning.

### European Guide Books Wanted for Armies Abroad.

The war service of the American Library Association is making a special appeal for copies of Baedeker's European guide books, especially those relating to Northern France and Belgium, although those for Southern France and Italy, besides other European countries, would also be welcome for the use of our men abroad who want to familiarize themselves with life, customs, etc., in their new environment. On account of the war it is now impossible to obtain new copies of the Baedeker books, which are published in Leipzig, the stock available outside of Germany having been used up early in the course of hostilities. If anyone wishes to answer this call by contributing a Baedeker, all that is required is to take it to the nearest public library, and the librarian will see that it is forwarded for dispatch abroad. Other books of European travel would likewise be useful.



## News and Views from Our Readers

### The Fight of Atheistic Barbarism Against Christianity and Civilization.

L. E. MORGAN, Smith & Morgan, Dothan, Ala.

Very few people agreed with you at the beginning of the present war in your belief that it was to be a war different from previous wars, and would involve the fate of Christianity and civilization and the very foundations of human society. Very, very few people realized then that the thin veneer of civilization spread over the Germans had been thrown off and the savage Huns were once more at the throat of civilization. I quote a recent editorial from Henry Watterson of the Louisville Courier-Journal:

Surely, the future looks black enough, yet it holds a hope, a single hope. One, and one power only, can arrest the descent and save us. That is the Christian religion. Democracy is but a side issue. The paramount issue, underlying the issue of democracy, is the religion of Christ and Him crucified; the bedrock of civilization; the source and resource of all that is worth having in the world that is, that gives promise in the world to come; not as an abstraction; not as a huddle of sects and factions, but as a mighty force and principle of being. The Word of God delivered by the gentle Nazarene upon the hill sides of Judea, sanctified by the Cross of Calvary, have survived every assault. It is now arrayed upon land and sea to meet the deadliest of all assaults, Satan turned loose for one last, final struggle. The Kaiser boldly threw down the gauge of battle—infidel Germany against the believing world—"Kultur" against Christianity—the Gospel of Hate against the Gospel of Love. Thus is he Satan personified—"Myself and God" merely his way of proclaiming it—for his "God" is Beelzebub, the Angel of Destruction, his aim and end a hell on earth.

Never did Crusader lift battle-axe in holier war against the Saracen than is waged by our soldiers of the Cross against the Germans. The issues are indeed identical. If the world is to be saved from destruction—physical no less than spiritual destruction—it will be saved alone by the Christian religion. That eliminated, leaves the earth to eternal war. For 50 years Germany has been organizing and laboring to supplant it with "Kultur," the genius of infidelity. Her college professors have been obsessed with it. Her universities have seethed with it. In proclaiming "Myself and God" the Kaiser has put the imperial seal upon it. When our armies have run it to its lair—when they have crushed it—naught will have been gained unless the glorious Banner of the Cross is hoisted, even as Moses lifted up the serpent in the wilderness, and the misled masses of Germany are bade to gather about it and beneath it as sadly they collect the debris of their ruin for the reconstruction of the Fatherland.

If this be a correct analysis of the struggle, and I believe it is, it seems to me we must at the present time look upon the German nation as the embodiment of sin and to be regarded with that hatred and detestation that everyone should feel toward the open and concrete manifestation of Satanic wickedness and evil. The Master taught the doctrine of love, but witness His denunciation of the wicked and scornful Pharisees and the devil-possessed Judas. It was Satan speaking through these willing subjects, and the Master recognized it instantly. The German Kaiser today is such an agent. The names of Nero, Herod, Ivan the Terrible, Duke of Alva—they no longer typify anything in comparison. As one thinks of the wrongs and crimes he is responsible for, of the human suffering he has caused, is it wrong, I wonder, to rejoice that very probably human retribution will be visited upon him, and then, when his miserable carcass is put in the ground his black, blood-stained soul shall have to appear before his Maker, there to give an account of his crimes here on earth? I do not believe it is wrong to view the matter thus. The Germans are today representing Hell on earth—fighting under the banner of Hell—trying to stamp out every semblance of the Christian religion and all that it means to the people of this earth, just as Mr. Watterson says. Does one think they will be ultimately successful? Someone might say:

Truth forever on the scaffold,  
Wrong forever on the throne.

But wait:

That scaffold sways the future,  
For behind the dim unknown  
Standeth God within the shadow  
Keeping watch above His own.

As the blasphemous Kaiser, the blackest character in all human history, calls upon God to bless his on-

slaughts on the Christian religion, and his murders, thefts and crimes, praises God for the success of his armies in murdering innocent men, slaughtering little helpless babies and children and raping women, as he orders the church bells rung in gratitude to his German Deity while on the bosom of the cold North Sea are still floating the little pitiful bodies of the Lusitania babies, we may be sure that, though he continue for a while, the end is certain, punishment is sure, and right will ultimately prevail.

We had better view the matter as it really is—a situation and phenomenon unprecedented in human history. The Germans are no longer normal human beings, but are now devil-possessed creatures, absolutely without human sentiment, sympathy or pity. We must fight them as we would rattlesnakes and rabid dogs. This should be the view of those of us who remain at home and subordinate everything to this one supreme purpose, and this should be the view of those who go to France to help kill them with bullet, bomb and shell. We hope they will repent and change. Until they do we have no alternative but to take them as they are and devote everything we are and have to the work of exterminating them from the face of the earth.

### Jacksonville Disgraced, as Seen by a New Yorker.

CHARLES F. ROTH, Manager National Exposition of Chemical Industries, New York City.

Turning from the Jacksonville station toward the hotel, the writer had to traverse a main thoroughfare of the city, and in passing along what in any case was a disreputable street saw great numbers of "package stores," each with several negroes constantly engaged in packaging the sales for an unending throng of purchasers. These came from not only the city itself, but from the neighboring State of Georgia and from the Carolinas, all of which are dry States. It was Christmas Eve. These "package stores" remained open till 7 P. M., and then only a few were officially closed, and closed they were, closed and barred as tight as banks. In these stores no liquor can be drunk, but must be taken away by the purchaser, and to help the wayfarer from a distant point and State who has unfortunately come without the necessary bag in which to carry home his purchase many of these stores have on hand great numbers of suitcases, the poorly-made paper kind, of a dull dark red or brown, and which are sold to them for \$1.15 by the liquor traffic, the same cases which a few doors away in the clothing shop can be bought for 96 cents. And the liquid content carried away in these cases costs the purchaser upwards of \$1 per half quart, about twice as much as a better grade of whiskey in the Northern States does.

Traveling through the South one sees in the railroad terminals men coming from the trains bearing carefully just such kinds of suitcases and in such a way that it seems most wonderful the officers of the law do not recognize them.

Not only is the traffic carried on for civilians, but there is a certain class of individuals who traffic in the souls and morals and honor of the soldiers at Camp Johnson. Some of these secure liquor from the "boot-leggers," and these numbers have been such that the military authorities have posted patrols for just the purpose of arresting these criminals. The work of the patrols is handicapped, however, in that the Government has failed to provide them with sufficient funds to purchase the necessary "booze" to convict these liquor traffic criminals. The patrols must use their own personal finances, and to their great credit they are performing their work effectively and efficiently, though if funds were provided them their captures would be surprising in their numbers.

Every visitor to Jacksonville must needs pass along this street at some time, and being such an important thoroughfare, the measure of disgrace upon Jacksonville is the greater. But no city ordinance should be made to send these stores to another section of the city. They should be stamped out of the city entirely, and when this is done, then, and only then, can the people of the United States feel that the Government has chosen

wisely the location of a camp outside of that city in which to train and fit those men who must officer the armies now being raised to fight for this great democracy. And then will Jacksonville become worthy of consideration by the Emergency Fleet Committee to make that city a great shipbuilding center. What avails a city of all her natural advantages if she does not keep her domestic self and household clean? Clean up, Jacksonville! Sweep your household clean of the disgrace you bear yourself, your State and your nation!

### North Carolina Organization of Producers Working for Community Development.

P. C. SQUIRES, General Manager Garland Fruit and Produce Exchange, Garland, N. C.

There is suitable building here for shirt or overall factory, with plenty of women help. Parties contemplating starting such business would find encouragement from our business men.

A canning factory is also greatly needed.

Inquiries addressed to the manager of the Garland Fruit and Produce Exchange will receive prompt attention.

Our exchange will increase its acreage 600 per cent. in various food crops.

### Opening for Steam Laundry.

CLAUDE F. JOHNSON, Editor and Manager St. Cloud Tribune, St. Cloud, Fla.

St. Cloud has a population of 4000 in summer, 7000 in winter, and has no laundry, the work being shipped to other cities at present. It occurred to us that your paper could make the statement that there is an opening for a steam laundry here and reach someone who was interested.

There is a good water supply at the lake on the northern end of the city, and the city is just completing a water system that reaches over the entire city. Wood is used in this section for fuel, and is plentiful.

### The Railroad Breakdown and Its Influence on Business.

J. B. BUTLER, Lynn, Ark.

I ordered a car from the Frisco Railroad last July to ship ore; got car sent December 7 and shipped; have not heard anything from car since shipment was made December 7. Could ship carload each week if could get transportation. This is an example of the inefficiency of railroad service, which has closed down my business.

### Barges Wanted on Cumberland River.

LEWIS L. BAXTER, President Cumberland River Steamboat Co., Nashville, Tenn.

There are, in all probability, going to be a number of barges needed here in connection with the Hadley's Bend project. Barges are almost an extinct species on the upper Cumberland. Can you assist in locating equipment of this kind for sale or charter?

### Would Have Everybody a Reader.

E. SCOTT MILES, Sequatchie Coal Co., Chattanooga, Tennessee.

Enclosed you will find check for subscription. I think the work you are doing is splendid. I wish every person in the United States could see a copy of your MANUFACTURERS RECORD every week.

### Commercial Secretary Wanted.

HATTIESBURG COMMERCIAL CLUB, Hattiesburg, Miss.

The Hattiesburg Commercial Club has been completely reorganized with a working fund of \$10,000 for this year. We want a capable and experienced secretary.

## BIG DEMAND FOR LOUISIANA FARM LANDS.

**Profitable Sugar Operations Have Greatly Stimulated Activities of Planters—Millions to Be Spent in Plantation and Factory Betterments.**

New Orleans, La., February 19.—[Special.]—Idle lands in South Louisiana are very hard to find today. Sales of sugar-belt lands continue to be both large and numerous. In St. Bernard parish there is practically not an idle acre of arable land, and in every one of the other South Louisiana parishes sales of farm lands within the past two weeks have made great reductions in the waste land totals. Increasing prices have gone hand in hand with the growing selling activity. Established sugar plantations with factories on them are at a premium now. Those held by banks, having been taken over on uncollectible mortgage debts in the very lean years before the war, are being particularly sought after, but the banks seem to be holding out for the principal plus a very respectable interest on their forced investments.

The factories are now drying out their second sugars, which are the sugars obtained from the molasses drained off the first sugar, or first molasses. Soon they will finish this phase of their manufacturing, as most of the first molasses in the last season was sold as first molasses at better prices than the seconds and second molasses would have brought them. Such second sugar is now being consumed for table use all over the country, and some thirds of the crop before last are being used for human consumption, too. Seconds and thirds in normal years are only used for manufacturing purposes. Stock-feed interests will not be able to buy much black-strap molasses for stock feed mixing this year because it is being used for other more necessary human foodstuffs. The commercial temperature of the Louisiana sugar industry today is feverish. There is plenty inquiry, but little sugar.

Crop conditions are excellent. The seed cane is in fine condition and the outlook is for the best cane crop ever cut in this State in 1918.

Two new banks have been added to the New Orleans list and three more are rumored. About \$4,000,000 or \$5,000,000 will be spent on sugar factory and plantation betterments alone this spring and summer. To these immense improvement costs must be added the great sums to be spent for the volume of general construction work contemplated in the towns and cities of the sugar belt, whose banks are bulging with bullion. Reports from the factories as to new and improved machinery installations proposed are being received by sugar men in New Orleans in such numbers as to give good reason for the statement that every sugar-house in Louisiana will make wholesale alterations and additions this year. The more extensive manufacture of Louisiana plantation granulated sugar, which rendered very much appreciated service in the sugar famine days of the last part of 1917, is foreshadowed in the fact that the greater part of the machinery to be bought is of the peculiar types required in the manufacture of the granulated grades.

The Dunbar Molasses & Syrup Co. at New Orleans has been making enlargements and is going to make more, so as to increase the capacity of their plant about 200 per cent. before the next grinding.

Within the past half month two once prominent sugar concerns, put out of business by too much expensive past progressiveness in the face of free sugar, have executed complete "come-backs." The first in point of time and size is the reincorporation of the immense sugar-cane properties of the Lemanns of Donaldsonville, whose factory, Palo Alto, was dismantled about two years ago and sold to Cuba. They have incorporated three companies, one for each of their three principal holdings, with a total capitalization of about \$675,000 for sugar-cane producing purposes exclusively. They will not rebuild their factory, but will practice intensive cultivation of cane. Their places will be made to produce something like 30,000 or 40,000 tons of cane this year.

The Danos of Iberville parish bought the old Victoria factory of the Norman family at Patterson last week for \$105,000 and will make big alterations, it is said. The Danos were also knocked out of the business by the

threat of free sugar, but they have come back strong this year and have won back their former place in the sugar world.

Ground for the new Reserve boneblack refinery will be broken within the next few weeks. Cuban raws will be refined at the Reserve sugar factory this year into plantation granulated.

A ruling from the International Sugar Committee of refiners is needed to let the sugar producers of Louisiana know if the differential between raws and clarified is going to be wide enough to permit the manufacture of clarifieds, considered by connoisseurs to be the purest and sweetest sugar made. Unless this differential is wide enough, no clarifieds will be made and raws and plantation granulated will hold the stage, with the odds on plantation granulated.

## Dauphin Island Developments Progressing.

Referring to the Dauphin Island developments, J. M. Dewberry, vice-president of the Dauphin Island Land Co., Mobile, writes to the MANUFACTURERS RECORD:

"The extension of the Bay Shore division of the Mobile & Ohio Railroad to Cedar Point is almost completed, and a schedule is expected during the month of March. Cedar Point is a short distance across the shallow waters at Grant's Pass from Dauphin Island, and a boat schedule will be operated between Dauphin Island and Cedar Point, meeting all trains. Pending the completion of the railroad from Cedar Point to Dauphin Island and to the site of the proposed coaling station near Fort Gaines on the east end of the island, it is likely that a car ferry service (similar to that used in New York harbor) will be established so that Dauphin Island may at once enter upon its mission as a convenient deep-water coaling station and shipping center.

"A deep-water coaling station at Dauphin Island, where ships from Mobile and other Gulf ports can fill their bunkers will have the effect of deepening all the ship channels and harbors of the Gulf, and with but a slight cost in time and money. This fact should naturally appeal to the Government and all other shipping interests, especially at this time, when economy, dispatch and maximum results are so important. The outlook for the big development of Dauphin Island as a deep-water harbor, coaling station and world port is good and will be persistently pushed, but its developers will not wait for the realization of all this before giving the public the opportunity of enjoying the island as a summer and winter resort. Hotel accommodations have already been provided, streets have been opened up and improved, a modern bathhouse erected on the south beach and artesian water system installed. Other improvements are in contemplation and under way, and within a few weeks, when transportation will be established, the general public may enjoy this most beautiful and attractive island."

## Hardwood Manufacturers Elect New Officers.

At the recent annual meeting of the Hardwood Manufacturers' Association, held in Cincinnati, O., the following officers were elected for the ensuing year: President, E. O. Robinson, the Mowbray & Robinson Company, Cincinnati, O.; first vice-president, J. W. Mayhew, W. M. Ritter Lumber Co., Columbus, O.; second vice-president, R. L. Hutchinson, Hutchinson Lumber Co., Huntington, W. Va.; treasurer, M. W. Stark, American Column & Lumber Co., St. Albans, W. Va.; assistant to president, F. R. Gadd, Hardwood Manufacturers' Association, Cincinnati, O. Board of governors: F. L. Dakin, Cherry River Boom & Lumber Co., Philadelphia, Pa.; R. H. Vansant, Vansant, Kitchen & Co., Ashland, Ky.; J. B. Burke, Lamb-Fish Lumber Co., Charleston, Miss.; E. A. Lang, Paepcke-Leicht Lumber Co., Chicago, Ill.; W. H. Dawkins, W. H. Dawkins Lumber Co., Ashland, Ky.; W. E. De Laney, Kentucky Lumber Co., Lexington, Ky.; Leon Isaacsen, Yellow Poplar Lumber Co., Coal Grove, O.; R. M. Carrier, Carrier Lumber & Manufacturing Co., Sardis, Miss.; Ralph May, May Bros., Memphis, Tenn.; W. M. Ritter, W. M. Ritter Lumber Co., Columbus, O.; J. H. Himmelberger, Himmelberger-Harrison Lumber Co., Cape Girardeau, Mo.; B. B. Burns, C. L. Ritter Lumber Co., Huntington, W. Va.; Peter Carroll, Clay Lumber Co., Charleston, W. Va.; B. F. Dulweber, Kraetzer-Cured Lumber Co., Memphis, Tenn.

## Highways Leading to Cincinnati Widely Used to Bring in Livestock and Farm Products.

By L. E. BURRIDGE, Ideal Concrete Machinery Co., Cincinnati, O.

For the past 30 years the farmers and stock raisers have been accustomed to ship most of their stock into Cincinnati over many railroads. They would probably be doing so today had not the railroads become so congested that it was necessary for the farmers to find some other means of transportation.

The steady movement of foodstuffs to market is of great importance at this time, and the situation would have been serious had it not been for a lively motor-truck traffic which promptly developed into large proportions.

Fortunately, the roads around Cincinnati are good, and throughout the year 1917 there were 77,244 hogs, 23,618 sheep and 28,545 calves hauled into Cincinnati over our highways from within a radius of 30 miles. Also 27,721 head of cattle were brought to market, although about 40 per cent. of them were driven in. These figures do not include the diminishing consignments which still come in by rail and boat.

Fewer cattle are being driven in each month. Cattle cannot be driven any distance in cold weather and in hot weather they become so heated that they do not command a ready market among the packers, who declare that the meat of such cattle becomes very dark and unwholesome. Today, hogs and sheep arrive in large double-deck trucks. Cattle are also brought in in specially constructed auto trucks, and the distribution of livestock continues without interruption.

"Will all of this business revert to the railroads again in normal times?" I asked one of the truck drivers. "Not a chance," he replied. "The stock is hauled cheaper and arrives in better condition. Why, a farmer can bring his stock in with a motor truck and sell it in about the same time as would be required to take it to the railroad and get it loaded into a car. He also saves at least 24 hours in getting his stock to market."

Although this is a graphic illustration of the importance of our roads to this community and to the nation, it does not by any means show the full extent of their usefulness. Farm products of all kinds pour into the city from the surrounding counties, and each returning truck carries the wares of some Cincinnati merchant.

Of course, there is still considerable room for improvement in our roads. Motor-truck traffic has its drawbacks when the spring thaws come and our macadam roads get soft and full of holes. Hard-surface roads are needed badly, as they enable traffic to continue throughout the year regardless of the weather conditions. Also, with more hard-surface roads we could just as easily carry on a thriving business within a radius of 50 miles of Cincinnati, as we now do within a radius of 30 miles. In fact, daily motor-truck service from Cincinnati does extend for 50 miles into territory reached by the better roads.

As the superiority of the hard-surface road in this locality has been firmly established, the Hamilton County Road Commissioners have decided that in the future our roads shall be either paved entirely with concrete or brick with concrete base.

The few concrete roads that we have are very satisfactory, so much so that motor-truck drivers will go a considerable distance out of their way to keep on a good concrete road. Not only is concrete being used extensively on our main arteries of trade, but it is also being used to a great extent in constructing feeders to the main highways.

The maintenance of our highways is a matter of increasing importance, as the volume of business going in over them is increasing rapidly. It is estimated that the 1916 business will be trebled in 1918, and the prosperity of both of our rural districts and the city will be closely connected with the development of our highways.

## Aluminum in 1917.

The value of the primary aluminum made in the United States in 1917 was \$45,882,000, an increase of \$11,982,000 over the value of that made in 1916. This increase appears to be due chiefly to an increase in the quantity of metal produced, but in part to an increase in the price of the metal.



## \$25,000,000 ALREADY SPENT AT SPARROWS POINT.

More Than as Much Again Will Go Into Improvements of the Bethlehem Steel Co. There.

Charles M. Schwab, chairman of the Bethlehem Steel Corporation, visited the Sparrows Point plant of the Bethlehem Steel Co., near Baltimore, last week to inspect the progress of the extensive improvements now under way there and which will total more than \$50,000,000 when completed.

"We have already expended \$25,000,000," said Mr. Schwab to a representative of the MANUFACTURERS RECORD, "and we are continuing our work along the same lines, making everything of the best as we have already done in what has thus far been accomplished."

Since Mr. Schwab was last at Sparrows Point two of the large units in the list of improvements described in the MANUFACTURERS RECORD February 8, 1917, have been completed and are now in full operation. These are the big tinplate plant and the 110-inch steel-plate mill. The other units are in process of building, a most conspicuous feature of them being the open-hearth shop, a huge structure now going up immediately west of the railroad station.

Mr. Schwab expressed himself as being well pleased with the advancement of the work.

As stated in the MANUFACTURERS RECORD a year ago, it will take about three years altogether to fulfill the plans at Sparrows Point. There are yet to be completed the first two of four proposed blast furnaces, each of 500 tons daily capacity (which will give the plant six furnaces as soon as they are finished and ultimately eight), 240 more by-product coke ovens, a 36-inch reversing slabbing mill, a 40-inch blooming mill, 24-inch and 18-inch continuous mills for rolling billets and sheet bar, a 60-inch plate mill, a 160-inch plate mill, three continuous merchant bar rolls, besides which the improvements for steel-making include four 200-ton tilting furnaces for operation in connection with three 25-ton Bessemer converters. Thus the plant will be able to make either straight Bessemer steel, open-hearth steel or duplex process steel. In addition to all this, the erection of the blast furnaces will require nine gas engines to drive blowers for them. This will make a total of 14 gas engines for blowing, besides the old steam-driven blowers, as five gas engines are already in use, they having been put in before the Bethlehem company bought the plant. For operating all machinery electric power will be ultimately employed, the plant for producing it comprising four twin electric generating machines in the beginning, but four more of them will be added later.

In the marine department enlargements of capacity are also in progress. The new machine shop and the fabricating shop heretofore described have now been in use something more than a year, and since they were completed another way for shipbuilding has been erected large enough for vessels of 20,000 tons, or 700 feet long. This makes seven shipways at the yards.

The improvements also cover additions to the ore-handling equipment on the waterfront at Sparrows Point, where the ore comes by steamers from the company's own mines in Cuba. Adjacent to the coal dock will be a coal-handling and coal-crushing plant. Furthermore, a railroad  $6\frac{1}{2}$  miles long will be another feature of the greatly enlarged plant.

A number of new dwellings have been built, some of them one story and others one story with attic and two stories with attic. Some larger houses of three stories are about completed. But the main housing plans of the company are to be fulfilled at Dundalk, three miles north of Sparrows Point, by both electric railway and steam railroad. These are yet in embryo, or rather they are awaiting the announcement of a decision of the United States Shipping Board, for the employees which they will shelter will be men engaged upon the construction of ships. A separate corporation, the Dundalk Company, has been formed to build the houses at Dundalk.

W. F. Roberts is vice-president and general manager in charge at Sparrows Point.

## Crushed Stone Industries Organize.

A number of the leading crushed-stone industries of the country recently organized the National Crushed Stone Association. The objects of this association are

to advertise the value and usefulness of crushed stone, to establish standards for production, and to undertake other work that will serve to stimulate and advance the general use of crushed stone. The association will also closely co-operate with representatives of the State and Federal governments looking to the construction and maintenance of highways; and it has become a member of the Highway Industries Association.

The officers are: President, A. J. Blair, treasurer and general manager Lake Shore Stone Co., Milwaukee, Wis.; first vice-president, S. M. Hall, manager Mount Pleasant Stone Co., Mount Pleasant, Iowa; second vice-president, John Rice, president General Crushed Stone Co., Easton, Pa.; treasurer, A. J. Sullivan, vice-president United States Crushed Stone Co., Chicago, Ill., and secretary, N. C. Rockwood, editor Rock Products, 338 South Clark street, Chicago.

## War Department Speeding Up Production of Munitions and Supplies.

Washington, D. C., February 25—[Special.]—The beneficial results of the airing of War Department methods, and the inquiry into the shortcomings of Secretary Baker's administration are becoming daily more apparent.

When the Secretary of War was summoned before the Senate Committee on Military Affairs to explain the delay in providing guns for the men called to duty, or to show a reason for the shortage of blankets, overcoats and other necessities of clothing in winter weather, while huge contracts for shoes provided a surplus of those articles, Mr. Baker's answers were so unsatisfactory as to indicate that in reality he had little personal knowledge of many features of the War Department work.

In reply to the criticisms which followed, it appears that the Secretary of War has begun an investigation of his own department, and is now able to tabulate with greater accuracy the work which is being done. He has also acquainted himself with reasons for some of the actions of his subordinates.

According to statements which have just been made public by the Secretary of War, an accumulation of reserve stocks is desired, and, it is stated, is being secured.

Although less than a month ago the Senate Committee on Military Affairs found a deplorable rifle shortage existing, it is now declared that a reserve of more than 100,000 new rifles has been acquired, and modified Enfields sufficient to arm 14 army divisions each month are being delivered to the Government arsenals. It is said that rifles are now being turned out faster than in Great Britain at the end of the second year of the war.

Secretary Baker now reports that the Quartermaster-General's Department has on hand and due on contracts 7,564,000 field shoes and 7,873,000 marching shoes, adding that a million additional shoes will be necessary during the year. It is stated that General Pershing has requested a monthly shipment of 18,500 pairs of shoes for each 25,000 men in the expeditionary force. While this is at the rate of nine pairs of shoes for each man in a year, and is in excess of actual consumption, based upon experience in France, the aim is to build up a reserve supply of shoes for all troops in France. When a supply has been accumulated it is stated that the shipments will be reduced.

Letting the light into the War Department is at least resulting in Mr. Baker taking the public into his confidence to a greater extent than heretofore.

## Experimenting With Long Staple Cotton in South Texas.

Corpus Christi, Texas, February 23—[Special.]—Attracted by the big demand for long-staple cotton, together with the fancy prices that are being paid, an arrangement has been made whereby Thomas Bell of the Corpus Christi Cotton Compress Co. is shipping into Corpus Christi two solid carloads of long staple cottonseed, to be distributed to the farmers of Nueces county and adjoining territory.

The Government is anxious for the farmers to plant this seed, particularly in this section, where the land is so well adapted to the growing of long staple cotton. Two bales of this cotton grown here last season sold at

New Orleans for 39 cents, a price at that time 13 cents above the market.

Especially is the cotton of this vicinity needed in aeroplane and rubber-tire construction, and it is to supply such needs that the Government is asking for a large planting of the long staple.

Mr. Bell is getting the shipment of seed from Clarksville, Texas, where farmers last year averaged from \$50 to \$60 a bale higher than market prices for product of short staple seed.

## Organized Effort to Fight Possible Invasion by Pink Boll-Worm.

Jackson, Miss., February 25—[Special.]—An organized effort to check possible invasion by the pink boll-worm has been put under way in this city.

Representatives of nine Southern States, including commissioners of agriculture, agriculturalists, large planters and Government experts, met in Jackson at the call of Governor Theo. B. Bilbo, to discuss ways and means of combating the boll-worm, and the conference organized itself into a permanent body, with Alex. Y. Scott of Rosedale, Miss., one of the largest cotton planters in the South, as president, and G. E. Nesom of New Orleans, editor of Modern Farming, secretary.

An executive committee will be named later. Resolutions adopted at the meeting urged, first of all, that every Southern Legislature appropriate necessary funds for fighting the boll-worm. Texas has already done this, and the fight is well organized there. They also urged that the most careful watch be kept for any signs of the pest in uninfested territory, that experiments be conducted to find an effective poison to be used against the worm, and that fuller protection be given the natural enemies of the worm, such as insectivorous birds.

An effort will be made to have the present Mississippi Legislature appropriate whatever funds are necessary for this State's part in the fight, and to undertake the work at once.

A feature of the conference was a strong speech by J. A. Evans, assistant to Bradford Knapp, chief of the Federal Plant Industry Bureau. Mr. Evans touched but briefly on the subject of the boll-worm. He said it was a vital topic, but the South was concerned with a more vital one at present—the question of raising more foods.

"I am charged by the Government, which I represent," said Mr. Evans, "to impress upon each one of you the fact that while the South can and must feed itself, it has got to go much further this year, and do everything in its power to feed the men whom our Government is placing under arms for our defense. In order to train and to fight effectively our men must be fed. If we don't feed them, who will? You can't expect the women and children of France and England to produce the food."

"It is my job and your job to keep this fact before the people, and to impress it upon them that if the South does not meet this situation, then who will? It is a great opportunity for the performance of a great duty."

## For a \$500,000 Mattress Factory.

From 500,000 to 600,000 mattresses annually will be the capacity of a plant which Tom B. Burnett & Co. will establish at Dallas, Tex., augmenting this firm's present facilities. About \$500,000 will be invested \$300,000 being for the building and \$200,000 for the machinery, with its accompanying mechanical equipment. An uncompleted four-story brick and reinforced concrete building has been purchased for \$250,000 and will be completed at cost of \$50,000. This plant will employ 200 operatives.

## Fuel-Saving Powders.

Mr. C. T. Baker of Jacksonville, Fla., writes the MANUFACTURERS RECORD warning power-plant owners, especially the small concerns, which, he says, are usually the ones that make the mistake, against buying so-called fuel-saving powders, which are claimed to lessen the amount of fuel consumed. The technical and engineering papers of the country, he says, have in the past often exposed many of these fuel-saving propositions.

## HOW MANUFACTURERS CAN HELP TO INCREASE NATION'S FOOD SUPPLY.

### Important Part Workmen Can Play if Given an Opportunity to Raise Their Own Vegetables.

Washington, D. C., February 16—[Special.]—Manufacturers have an opportunity to do a patriotic service and to help themselves and their employees at the same time, thus accomplishing really a threefold good.

President Wilson has made this statement: "Let me suggest that everyone who creates or cultivates a garden helps, and helps greatly, to solve the problem of the feeding of the nations."

Employees of manufacturing and commercial concerns should be encouraged and assisted in the important work of food production. This can be done through the establishment of garden tracts which the men can cultivate. There they can raise a considerable part of the food they need for themselves and their families. This will—

1. Increase the nation's food supply.
2. Enable the men to save more money and make them more contented.
3. Lead to a spirit of helpfulness and co-operation throughout the plant.

A number of companies throughout the country have started this form of mutual interest development, with results which have been most encouraging from every point of view. With the examples already furnished and the excellent results obtained to guide them, many other concerns have announced their intention or are seriously considering the proposition of providing for their workers plots of ground, either owned by the company or secured by lease, where the men can raise their own vegetables.

It will be necessary in the majority of cases for the head or heads of the concern to help the men in getting started on their "war gardening" enterprise. It is probable that they will need some financial assistance in addition to the encouragement and inspiration required to have them make a beginning of the work. When a piece of ground of considerable size has been picked out, the whole area should be plowed and put in shape for the men, a tractor being secured if available for this work. Furthermore, it is usually desirable to buy the fertilizer and seed in large lots and supply it at cost, or about cost, to the men, allowing them to pay for it on the instalment plan after they begin to gather in some of their crops and enjoy the benefits thereof.

It was estimated last year by the National War Garden Commission of Washington that there were a total of 3,000,000 "war gardens" planted in back yards and on vacant lots throughout the United States, and the value of the product raised on these home garden plots reached the vast total of more than \$300,000,000. This meant the release of an immense quantity of meat, wheat and other supplies, for which the vegetables grown in home gardens were partial substitutes, for shipment to Europe.

Last year the commission distributed more than 2,000,000 of its little garden primers, which instructed the beginner what, when and how to plant. Reports being received already show that there will be a much larger number of war gardens this spring and summer. The patriotic response being made to the appeal to all loyal Americans to plant a garden is very encouraging in view of the increased and insistent demand for food this year.

The transportation question must also be considered, and here the home garden can be of material help, in that the nearer every community comes to feeding itself the less demand will there be for freight cars to haul produce for long distances. In this way thousands of cars can be released for service in the shipping of war munition necessities, and at the same time thousands of workers now engaged in handling and transporting such market products will be freed for other kinds of labor in which they are needed.

On account of farm labor shortage, it is more than ever the duty of the manufacturer to do what he can to help out the farmer in his dilemma. Thousands of the men now employed in factories and mills have had farm experience, many of them having spent a large part of their lives on farms, while other thousands inherit the farming instinct from their ancestors. It will thus be a comparatively easy matter to interest them in anything pertaining to agriculture, and this war garden work will particularly appeal to them.

The National War Garden Commission, Washington,

D. C., whose purpose is to aid city farmers to raise food, will furnish single copies of "War Vegetable Gardening" free to anyone upon request.

The commission will send this 32-page illustrated booklet in limited quantities free to any concern which desires to distribute them.

In large quantities it will supply them at slightly less than cost—\$15 per thousand—to any company or concern, with the company's imprint, if desired, upon them.

## TEXAS GOING DRY?

### Protection of Soldier Boys Likely to Eliminate Saloons from All Populous Centers, With State-wide Prohibition Not an Improbability.

Corpus Christi, Tex., February 22—[Special.]—Governor Hobby, in calling the Texas Legislature into special session on February 28 to consider the passage of a bill forbidding the sale of liquor in or shipment into any point within 10 miles of an army camp is believed to have virtually issued the order for the execution in Texas of John Barleycorn.

It so happens that almost every wet Texas city of any size, as well as many of the smaller communities, have soldier camps. San Antonio, Fort Worth, Houston, Galveston, El Paso, Brownsville and Laredo are the principal Texas cities that will be as arid as the Sahara desert should the Legislature, as seems assured, pass the legislation that Governor Hobby requests in the convening of the special session.

Dallas, Waco, Austin, Corpus Christi and a number of others among the larger towns of the State are already dry, being under local option.

Both the lower and upper houses of the State Legislature have an overwhelming majority in favor of prohibition. In addition to passing the 10-mile law, many of those who profess to be posted say that the Legislature will also ratify the Federal prohibition amendment, and there is also an urgent demand from many of the prohibitionists for the adoption of statutory prohibition. Some of the largest and most influential newspapers of the State are urging the Legislature to adopt this means as the quickest method of ridding army camps of bootleggers, whose activities the county and city authorities seem unable to stop.

The quick action of Governor Hobby in calling the Legislature into session for the avowed purpose of protecting the several hundred thousand soldiers training in Texas from getting liquor has thrown the liquor interests of the State into a panic. The passage of the law would put 90 per cent. of the saloons in the State out of business. The liquor men are massing their forces for a determined fight.

### How Brazilian Ores Could Help Iron Developments in Virginia.

Staunton, Va., February 16.

#### Editor Manufacturers Record:

The statement in the clipping you send me that the Graham furnaces of Virginia would manufacture ferromanganese is of interest. It emphasizes the fact that manganese is another material in which this country is not "self-sustaining," but it also calls attention to Brazil as an ore producer. In happier times that country will supply us iron ore to be smelted on our seacoast in exchange for coal which we will send there.

Some of the largest and purest bodies of iron ore in the world are found in Brazil. If the roads which center at Norfolk and Newport News would arrange for the importation of iron ore from that and other foreign countries, and for carrying it west in the empty coal cars which stream by the furnaces on those lines, it would serve to revivify all of the Virginia furnaces and lead to a great and permanent growth in the iron and steel development of the South. I feel certain this will happen some day, but the co-operative effort of the Norfolk & Western and the Chesapeake & Ohio roads will bring it about the more quickly.

CHARLES CATLETT.

Texas produced approximately 5,000,000 pounds of commercial honey last year, leading all the States in this industry.

## North Carolina Civil Engineers Organize State Association.

At a meeting of a large number of representative engineers of North Carolina, held in Durham last week, plans were perfected for the permanent organization of the North Carolina Society of Civil Engineers.

The need of a society of this character and the objects and aims of such an organization were enthusiastically discussed. It was determined to include in the seat of activities of the society all lines of strictly professional civil engineering work.

The objects of this society are to promote the interests of the engineering profession; to secure better and more efficient service for the public; to disseminate engineering knowledge; to bring about a closer personal acquaintance between the engineers of the State; to foster better standards of engineering ethics, and to safeguard and protect the public from incompetency and inefficiency in all lines of civil engineering work.

It was decided to hold a meeting of the executive committee in Raleigh, N. C., early in March to draw up a constitution and by-laws and plan of organization to be submitted at the next meeting of the society.

The following officers were elected: John H. Ambler, consulting engineer, Winston-Salem, N. C., president; R. P. Coble, Greensboro, N. C., vice-president, and Ira B. Mullis, Raleigh, N. C., secretary and treasurer. The following executive committee was elected: R. E. Snowden, Snowden, N. C.; D. H. Winslow, Raleigh, N. C.; W. L. Craven, Concord, N. C., and C. R. Thomas, North Carolina State College of Agriculture, West Raleigh, N. C.

## \$2,000,000 North Carolina Fisheries.

General fisheries and plants for the manufacture of fish fertilizer and oil on the North Carolina coast will be operated by the Fisheries Products Co., incorporated with \$2,000,000 authorized capital. Thomas W. Davis and H. B. Therian of Wilmington, N. C., and Thomas H. Hayes of New York are the incorporators.

This new corporation will continue an established fishery and manufacturing plant, employing nearly 1000 men. It is now constructing additional buildings and will install an equipment of new machinery largely increasing its output of fish oil, fish fertilizer and other fish products, besides arranging to catch and market food fish. The company's ships range the Atlantic coast from Delaware to Florida, catching mainly the menhaden.

The new facilities on the coast include a cold-storage plant with a separate department for handling edible sea food, which will be smoked and packed and otherwise prepared for shipment. The ships have complete mechanical equipments for catching and handling fish, the steamers being unloaded by bucket elevators, which are conveyed directly to the cooking, pressing and grinding departments on shore. They are being provided with new apparatus to catch and handle food fish, which will be landed at its plants on the Atlantic coast and there prepared for shipment to market. New uses have been found for the company's product during the past year, and the fish scrap hitherto used only for fertilizer is now being dried for chicken feed and mixed with other feeds for cattle and hogs.

## To Manufacture Leather Products.

Four hundred pairs of infants' shoes, 30,000 leather washers and 700 pounds of mattress tufts will be the daily capacity of a factory which the Memphis (Tenn.) Shoe & Trimming Co. will establish. This company has organized with \$100,000 capital and the following officers: James F. Knowlton, president; Julius S. Knowlton, secretary-treasurer; both of Grand Rapids, Mich.; William J. Plant, general manager, Rochester, N. Y., and Grand Rapids. This enterprise will be a consolidation of three Northern plants, and it will employ 100 operatives.

## Automobile Line to Be Run.

The Hendersonville Interurban Co., Hendersonville, N. C., has been chartered with \$50,000 authorized capital, of which \$5000 is subscribed, to operate automobiles for freight and passenger service in and around Hendersonville. B. Jackson, J. M. Rhodes, S. Maxwell and W. H. Cody are interested.



# The Iron, Steel and Metal Trades

## Improvement in Steel Situation as Railroad Congestion Clears Up—Consumers Show Increasing Interest in Pig-Iron.

New York, February 25—[Special.]—The past two weeks of milder weather, with melting snow and breaking up ice blockades in rivers and harbors, have resulted in the clearing of a great deal of the freight congestion that has hampered railroad operations throughout the country. Reports in general are very favorable from the railroad point of view. From the standpoint of shippers there has been only a slight improvement up to date, but that is in the nature of the case, since the clearing up of operation was necessarily directed to the moving to destination of cars already loaded and stalled at various points. The movement of empties to shippers is the second stage in the general operation, and has just made a good beginning. During the next two weeks the return of empties is expected to be much better.

Shipments of steel last week showed a steady increase, but the movement was not as rapid as could be desired. The mills are not yet up to 70 per cent. of production capacity, but March will probably open up with shipments at above 75 per cent. Tin mills are operating at about 60 per cent., and sheet mills at 40 per cent., or slightly above this figure. Plate mills are operating nearly full, and shell steel production is heavy.

The mills that require box cars for making shipments would doubtless be receiving much better supplies now were it not for the order diverting box cars to the West for moving grain. Two or three weeks ago orders were issued on the Pennsylvania, Baltimore & Ohio and Pittsburgh & Lake Erie railroads to furnish as soon as possible a total of 16,500 box cars for this movement—a very heavy drain. It is not known how long the cars diverted will be kept in the service. It is possible that they may be called upon to make only one trip to seaboard, but even that would consume considerable time.

The tinplate trade last week made a very favorable report as to improvement in shipping conditions. Several plants were in receipt of fair-sized batches of box cars for shipment East, when for weeks past they have received scarcely any cars for Eastern shipment and very light supplies for shipment West. Reports last week were to the effect that the Pennsylvania Lines East were practically clear to the majority of points, and freer dispatch is now expected. In the cases referred to the cars supplied will be used chiefly for smoothing out stocks in warehouse, and there will be no immediate result in increased production. The banking up of tinplate in mill warehouses came very suddenly, becoming important in December, and as there was no knowledge as to when cars would become available for shipments to the various points, it was impossible to pile the tinplate in such a way that the lots for which cars would first become available would be the most accessible. As a result of this condition much handling is involved in making shipments, and as the mills receive cars they are disposed to clear out some of the congestion before making more tinplate for warehouse.

An average of tinplate production throughout the industry last week was about 55 per cent. of capacity. Several plants are closed entirely, either from lack of additional storage capacity or through being insufficiently supplied with steel. The steel supply is very poor, but on the whole it is a trifle less of a restrictive influence than is the difficulty in shipping the finished product.

Early resumption and quick settlement of the negotiations between the Japanese and American governments regarding the exchange of steel for shipping is expected as a result of Washington's action in placing all exports from the United States under obligatory license. Since the negotiations were broken off last fall private Japanese interests have been negotiating with the American Shipping Board in an attempt to obtain a free license for the importation of American steel into Japan in exchange for shipping tonnage, authoritatively given at 150,000 tons as a maximum.

Awakened interest was shown last week by consumers of pig-iron. The production of pig-iron was rapidly increased during the past week, owing to the receipts of much coke that was stalled en route, and that has at last been forwarded to its destinations. A number of

furnace interests are showing the best operation in two months. The National Tube Co., for example, which has been operating 8 of its 11 stacks, had been down to 6 at one time recently. Many merchant furnaces that were operating with light blast and producing continuously but only half normal output are now running full.

Steel companies were actively in the market last week for pig-iron, both for low basic and phosphorus, but experienced difficulty in placing contracts except where Government war munitions are to be manufactured. Sales of foundry iron were confined to small lots for early shipment wherever furnaces had any iron to release, but there were many inquiries in the market for shipment over the second half of the year. There were numerous inquiries also for both foundry and steel-making grades for export, but Eastern furnaces, at least, are paying small attention to foreign business. Iron is scarce, even for home consumers, and except in the South very little iron of any kind can be purchased on foreign account at this time.

## Metal Markets Quiet and Easy.

New York, February 25—[Special.]—There is very little change to note in any of the metal markets from conditions previously reported in these columns. All consumers of copper appear to be securing all the red metal they require from their regular sources of supply. The fixed price also eliminates competition for the orders being placed. Certainly the way the copper situation is being handled and the response to the Government's regulations are a great success, and fears that supply would not equal demand prove to be unfounded.

The lead market was very quiet last week. There was a fair demand from regular consumers for spot lead at 7 cents New York from the American Smelting & Refining Co., and at 7.12½ cents from independents. Some interest was shown in the trade to the news that an increase in the production of lead from Mexico will be encouraged.

The absence of consuming demand in the spelter market last week was about as complete as anyone in the trade could remember. Many producers have gone day after day during the past month without making any sales or having any orders on their books upon which to figure. The producers are seeking an increase in their accumulated stocks at their works, notwithstanding the curtailed output. There has also been an accumulation of spelter in the past few weeks, which, although sold, could not be moved owing to car shortage and traffic conditions. Prime Western spelter for spot delivery New York is quoted at 8 to 8.12½ cents, for March shipment at 7.87½ cents and for April at 7.92½ to 8.02½ cents.

Sheet zinc makers do not appear to know where they stand as regards the prices announced recently by the Government, for they have not had the matter explained to them as yet. It is presumed, but not officially confirmed, that the price of 15 cents for zinc sheets is a base price subject to all the extras and discounts shown on the card issued by one of the manufacturers on January 24. The extras on this card were higher than were previously in effect, and it is not certain that the Government may not order them to revert to the extras that prevailed prior to January 24.

There were no new developments in the tin market last week worth reporting.

## Brisk Demand for Pig-Iron at Birmingham.

Birmingham, Ala., February 25—[Special.]—Sales of pig-iron by Southern furnace companies right now, practically for delivery after July 1, about equal the make. Deliveries are a little better than the make, and if this continues it will not be many months before the probable make will have to be looked to entirely. Melt of iron at home has been affected somewhat by the strike of metal trades crafts—molders, machinists, pattern makers, electricians and others—who demand the 8-hour day. One of the big cast-iron pipe plants at Bessemer, and also a foundry and machine shop there shutting down entirely, and a second foundry and machine shop partially, while contract shops and industrial plants

about the district are feeling the effect of the strike, though these crafts are in a profound minority. The cast-iron pipe trade is rather dull just now, and it would not be surprising to see other cessations of operations.

Pig-iron production in the Birmingham district shows a little improvement through good weather mainly, raw material supplies being kept up to requirements somewhat better than during last month. Fuel and coke have not been as plentiful as they might be, a cessation of work on the part of a few thousand miners affecting some interests and causing unrest with others. It is hardly possible for the Trussville furnace to get in operation now before the latter part of March, if then. The furnaces at Sheffield, Ala., will probably be in operation by the middle of March or before.

Many inquiries are being received for pig-iron, and there is reiteration that famine is likely to be announced before the last half of the year. There is little margin left on the probable make for the first half of the present year, but regular customers alone can have consideration given to demands. Many of the sales being made by the Southern furnaces are still in small lots. But little discussion is to be heard as to the probable revision of the price schedule as proposed by the Government for April 1, and consumers are not in the least worried on that proposition, in other words, the clause inserted in contracts by the furnace companies as to the revision is being accepted with all confidence. If the buying of iron continues as it has started, before the second quarter of the year is well on considerable of the probable make for the last half of the year will have been disposed of.

But few new orders for cast-iron pipe are reported, and no big business is in sight. Machine shops and foundries are well supplied with business, Government and otherwise, and if labor conditions do not disturb the activity there will be steady operations for many months.

A better tone is noted in the old material market, and dealers believe that the revision upward just made by the Government is going to have splendid effect. Local prices for scrap iron and steel have not advanced much yet. The statement is made that the difference in Government price fixed for heavy melting steel, for instance, and the local quotation is accounted for in the grading of the material. Local consumers are now paying a little more for this product. More inquiries are being received for old material, and if the railroad situation will only improve, and some of the embargoes are removed, a general improvement can be looked for.

Quotations of pig-iron and scrap iron and steel in the South are as follows:

### PIG-IRON.

No. 2 foundry.....\$33.00 to \$33.50, f. o. b. furnaces

(All differentials same as before Federal schedule went into effect with above prices as basis; charcoal iron, \$43.00; Government may revise schedule April 1, and, if lower, some furnace companies claim right to cancel contracts.)

### OLD MATERIAL.

Old steel axes.....	\$32.00 to \$33.00
Old steel rails.....	28.00 to 30.00
Heavy melting steel.....	25.00 to 27.50
No. 1 railroad wrought.....	27.00 to 30.00
No. 1 cast.....	25.00 to 26.00
Stove plate.....	19.00 to 21.00
Old car wheels.....	25.00 to 30.00
Tramcar wheels.....	21.00 to 25.00
Machine-shop turnings.....	17.50 to 19.00
Cast-iron borings.....	13.00 to 15.00

## Municipal Bond Issues of \$100,000 or More Must Get Approval.

It is announced from Washington that every proposed municipal bond issue of \$100,000 or more will have to be passed upon by the Capital Issues Committee of the Federal Reserve Board before it may be put on the market. Heretofore the minimum amount of any issue considered by this committee was \$250,000, but it was found that the great bulk of municipal bonds are issued in amounts less than that sum, so the limit was reduced accordingly. In applications for approval of bond issues the purpose of and the circumstances surrounding each issue must be fully described. For State, county, city or town issues it is required that a copy of the bill, resolution or ordinance authorizing them must be also presented to the committee. Those proposing new issues must demonstrate why they cannot be postponed until after the war or else that the need for them is greater than the need of the Federal Government in its military operations.

## Good Roads and Streets

### SOUTHERN HIGHWAY ACTIVITIES.

Details in regard to road and street undertakings and bond issues, briefly mentioned below, are given under the proper headings in our "Construction Department" and "New Securities," published elsewhere in this issue.

#### Bonds Voted.

De Land, Fla.—Volusia county voted \$200,000 bonds for highway construction.  
Jourdanton, Tex.—Atacosa county voted \$250,000 bonds for building highways.

#### Bonds to Be Voted.

Crockett, Tex.—Houston county votes March 2 on \$50,000 bonds for building highway.  
Mt. Airy, Md.—City will vote on bonds for street improvements.  
Wayne, W. Va.—Wayne county votes March 29 on \$1,000,000 bonds for road construction.  
Wayne, W. Va.—Wayne county votes March 29 on \$1,000,000 bonds for constructing brick on macadam or concrete highways.

#### Contracts Awarded.

Atlanta, Ga.—City awarded contract for 7000 yards of paving, for which \$25,000 is available.  
Jenkins, Ky.—City awarded contract for constructing 4500 square yards of concrete street pavement and 9100 square feet of sidewalk.  
Selma, Ala.—City awarded contract for 12,000 square yards of sidewalk and 6000 feet of concrete curb, \$18,000 being available for expenditure.  
Wichita Falls, Tex.—Wichita county awarded contract for building 108 miles of gravel roads.

#### Contracts to Be Awarded.

Ashdown, Ark.—Little River county has plans and specifications for constructing gravel highways to cost nearly \$273,000.  
Atlanta, Ga.—Fulton county invites bids until March 23 for 60,000 square yards of road paving.  
Corning, Ark.—Clay county will construct 32 miles of road to cost \$157,318.  
Crockett, Tex.—Houston county has \$75,000 available for building 40 miles of sand-clay road.  
Dade City, Fla.—City will expend \$12,000 for paving construction.  
Florence, Ala.—City will build several miles of pavement and sewers.  
Greenwood, Ark.—Sebastian county will build 15-mile highway costing \$84,400.  
McGehee, Ark.—Arkansas-Louisiana Highway Improvement District invites bids until March 5 for constructing 112 miles of mixed method asphalt roadway and 41 miles of macadam.  
Newport, Ark.—Jackson county has plans and specifications for gravel highway 18 miles long and 12 feet wide, estimated to cost \$105,217.  
Oakville, Tex.—Live Oak county will construct 75 miles of highway costing \$70,000.

### Alabama's Strong Attitude on Road Building During War Period.

Birmingham, Ala., February 25—[Special.]—Under the auspices of the Birmingham Civic Association a State highway conference was held here this week. This conference was attended by the highway officials of Alabama, as well as other public officials and representative business men of the State, who desire to register the sentiment of Alabama in favor of immediate construction of durable highways of military and economic necessity, and also to discuss motortruck haulage as an aid in the relief of railroad congestion.

Among the addresses made at the conference were: "Needed Road Legislation in Alabama," by W. S. Keller, State highway engineer; "Increasing Motor Traffic Demands; Higher Standards of Construction and Maintenance in Alabama," by Prof. G. N. Mitcham, State

Highway Commission; "Achievements by Motor Truck as a Common Carrier," by C. L. Harold, secretary Birmingham Civic Association; "Conclusions at Recent National Road Meetings," by John W. Sibley, secretary Southern Paving Brick Manufacturers' Association; "Necessity of Road Building at Camp McClellan, Anniston, Ala.," by C. E. Ireland, sales manager Birmingham Slag Co., and "Permanent Highway Construction," by C. N. Wiley, Portland Cement Association.

The sentiment of the conference was expressed in the following strong resolutions:

Whereas it is recognized that the paramount business of this nation is to win the war; and

Whereas the matter of adequate transportation facilities is of vital importance to the Government in successfully carrying out this supreme undertaking; and

Whereas the railroads of the country are overburdened to the extreme, and from the very nature of the case wholly unequal to the business, and traffic is so congested that relief must be found through some other channel; and

Whereas every day proves that the country must largely depend upon motor trucks and automobiles to take care of the overflow traffic and travel, and it must be patent to every intelligent observer that the highways of the country will furnish the solution of this problem if intelligently used in co-ordination with our transportation facilities; and

Whereas the economic and military value of motor-truck transportation in helping to move the products of the farm to the market; in handling short-haul freight between cities and within a radius of fifty miles of commercial centers; in relieving congested terminals of rail and water systems; in handling mails and parcel post, and for many varied services of our military forces, all combined to classify highways as a war necessity, and therefore an essential part of our war plans; and

Whereas the improvement of present highways and construction of additional permanent ones have been endorsed as a military necessity by Quartermaster-General Goethals, Major-General W. M. Black, Chief of Engineers of the War Department, and Major-General Leonard A. Wood; and

Whereas Food Administrator Hoover has gone on record favoring bond issues for permanent roads, stating that they promote "efficiency of transportation, which is one of the problems faced by his department in its endeavor to reduce the cost between the producer and the consumer"; therefore be it

Resolved, That this conference of highway officials and good-roads advocates, representing all sections of the State of Alabama, does hereby endorse and approve the action of the American Association of State Highway Officials as embodied in resolutions adopted at their recent convention in Richmond, Va., and urges the national Government to build more and better highways, as well as improve existing ones, to the end that the nation may be strengthened in the great world contest now facing us.

It was decided to send a copy of this resolution to Mr. McAdoo, Director-General of Railroads, and to the Special Issues Committee of the Federal Reserve Board. A resolution was also adopted endorsing the Chamberlain-Dent bill now before Congress.

### Highways That Are Essential to War Work to Receive Government Approval.

Washington, D. C., February 25—[Special.]—An impression has been created through erroneous press reports that the Capital Issues Committee of the Federal Reserve Board would classify all road work during the war period as "non-essential to winning the war," and would therefore refuse to approve any bond issues for such work. These reports caused nation-wide consternation and resulted in a storm of protest to Washington from highway officials and public-spirited citizens.

The truth of the matter is that the Special Issues Committee took no such stand, but, on the other hand, has given every encouragement that it will approve bond issues for highways that, after investigation, are shown to serve a real need during the war period. The committee will not, of course, approve bonds for any work that cannot be classified as a war need, and it has not been suggested by any highway official that ought but essential road work should be undertaken while the war is on.

The committee has had several conferences with the executive committee of the American Association of State Highway Officials, and is closely co-operating with them for carrying on road construction for which there is a proven need. The various State highway departments have also sent to the Office of Public Roads of the Department of Agriculture a list of highway improvements that are deemed absolutely essential in each State.

The limitation of highway bond issues in such manner

as will be most helpful to the nation during the period of the war was the subject of an important conference held in Washington recently, at which were present F. H. Goff, member of the Capital Issues Advisory Committee, representing the Federal Reserve Board; L. W. Page, Director of the Federal Bureau of Public Roads, and the members of the executive committee of the American Association of State Highway Officials. This latter organization is an official body whose membership is composed of the 48 State highway departments. A quick and loyal appreciation of the nation's needs and of the necessity for subordinating local benefits was shown by the representatives of the several States, including among their number George P. Coleman, State Highway Commissioner of Virginia; A. D. Williams, State Highway Commissioner of West Virginia; Henry G. Shirley, Chief Engineer of Maryland; Thomas H. MacDonald, State Highway Engineer of Iowa; Thomas H. French, State Engineer of New Mexico, and Paul D. Sargent, Chief Engineer of Maine.

A letter from Secretary McAdoo was quoted, in which he said: "We are engaged in a great war, a war in which the very safety of America is seriously imperiled. We cannot win this war unless every resource of the nation is carefully husbanded and used with the utmost intelligence. The great financial operations of the Government, greater than those ever undertaken by any government in the history of civilization, make it essential that every unnecessary expenditure by the Government, by the States and municipalities and by private corporations and individuals be avoided while the war is in progress. Unless this is done it will be impossible for the people of the United States to furnish the money which the Government must have to support its soldiers and sailors who are shedding their blood for us upon the battlefields."

The Federal Reserve Board, it was made clear at the conference, desired that during the continuance of the war State, county, municipal, corporate and individual financing should be strictly limited to projects which will contribute to the successful prosecution of the war, or which are necessary for public health and welfare. It was emphasized that only by subordinating local and personal interests to the public welfare, and by enforcing the most rigid economy in matters of public and private enterprise, as well as in matters of personal expenditure, that the United States can hope to bear its part of the financial burden of the war and to release sufficient labor and materials for war purposes without depletion of our resources.

Out of these conferences are expected to come a plan that will provide for necessary road maintenance and construction during the war, and from such information as can be secured it is believed that the policy of the Government will be to allow the construction of those highways that, after careful investigation, are shown to be an essential need in some phase of the country's war work.

### Texas Good Roads Association Elects New Secretary.

At a recent meeting of the Texas Good Roads Association, held at Taylor, Tex., D. E. Colp was elected secretary. The Associated Automobile Clubs of Texas was also organized at Taylor during the same week, and Mr. Colp was made secretary of this organization. Mr. Colp has long been an active, aggressive factor in promoting the development of improved highways in Texas.

The official headquarters of both the associations will be in Austin, Tex.

### Bid for Texas State Road Not Accepted.

A report from Austin, Tex., says that in response to the recent invitation of bids for the purchase of the Texas State Railroad, 32½ miles long from Rusk to Palestine, Tex., only one bid was received, and furthermore, that it would not be accepted. The offer was from the Midwest Iron Co. of Kansas City, which bid \$180,000 for the track and all accessories, with a proviso that the rails might be taken up and used elsewhere in Texas. It is stated that the Governor opposed the plan to "junk" the line.



## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### "STANDARDIZED FARMS" FOR GEORGIA.

#### Railroad Working in a New Way to Develop Agriculture.

The Georgia & Florida Railway Co., according to a report from Valdosta, Ga., is working out a plan of farm standardization to make the regions along its line especially attractive to settlers and other homeseekers, with the idea of having the southern part of Georgia great in agriculture and stock raising. This is being done under the direction of W. E. French, industrial agent of the road, and the supervision of T. E. Harris, general freight and passenger agent.

The "standardized farm," it is stated, is an idea copyrighted by Herbert A. Shearer, who originated it, and the railroad has obtained the right to use it in its territory. The company itself does not have any land to sell, but it is working for the development of the country which its line traverses; and it is beginning with the idea that 75 per cent. of the homeseekers expect to find farms for sale all ready for business, with buildings and with the land partly cultivated.

A standardized farm is outlined thus: A comfortable bungalow, a barn, a chicken-house, a good well, a certain number of acres fenced and planted, fruit trees, pecan trees, shrubbery, flowers, etc.; in other words, a home ready to be lived in and worked on. Such farms, it is believed, will find ready buyers, because 75 per cent. of the people coming to look for homes have found things heretofore so unimproved that they went back whence they came, their return being facilitated by the "knockers" found in every community, who discouraged them from remaining.

It is proposed to establish the first of the standardized farms in Jeff Davis county, of which Hazlehurst is the county-seat. Then gradually other similar farms will be established at different points along the line. It is said that a standardized farm of 120 acres, if properly worked, will produce, besides foodstuffs and other cash crops, 50 cattle and 100 hogs every year. It is further stated that in co-operation with the railroad company certain large livestock interests have offered to supply high-grade cattle and hogs for the farms if the newcomers will feed and otherwise care for them.

### Navy Department Wants a Railroad.

Application has been made to Congress by the Secretary of the Navy for authority to make a contract with a railroad company for the construction of a line from Washington to Indian Head, Md., where the proving ground for naval ordnance is situated and a special appropriation of \$300,000 is asked to pay the company for the work.

The Washington & Newport News Short Line is said to be the company referred to, and, as hitherto described, it proposes to build a railroad from Washington to Newport News, Va., about 150 miles. Frank S. Gannon, 55 Liberty street, New York, is its president, and associated with him are Channing M. Ward of Richmond, Va., chief engineer; Richard Armstrong, W. B. Livezey, A. L. Powell and others. The road will cross the Potomac River on a large bridge at Metomkin Point.

High cost of construction has hindered the fulfillment of the company's plans, but it seems probable that the needs of the Government, as expressed in the application of the Navy Department to Congress, will influence matters to bring about an earlier undertaking of the enterprise than would ordinarily be possible.

### May Be Operated by Southern Pacific.

A report from Denison, Tex., says that a special train carrying valuation officers and engineers representing the Southern Pacific Railway and the Union Pacific Railroad, together with officers of the Missouri, Oklahoma & Gulf Railroad, has made a run over the latter,

which extends northward from Denison to Joplin, Mo., 225 miles, to inspect the line, and that this has given rise to a report in railroad circles that the road, which is now in a receivership, will later be operated under the direction of the Southern Pacific company.

The Missouri, Oklahoma & Gulf Railroad was built some years ago by Wm. Kenefick of Kansas City, who is now associated with the receivers in the conduct of the property, and its possibilities as a connecting line between the Union Pacific lines on the north and the Southern Pacific lines on the south have long been understood and recognized. The road runs via Muskogee.

### BALTIMORE'S HARBOR BELT LINE.

#### A Railroad Nearing Completion Which Will Encircle Much of the Waterfront.

Work is being rushed to complete the Baltimore Harbor Belt Line Railroad, which will be nearly three miles long, and which will connect with the Baltimore & Ohio, the Pennsylvania and the Western Maryland railroads, facilitating the interchange of freight between these trunk lines and also extending valuable transportation accommodations to various commercial and industrial enterprises. It is owned by the municipality, and it will be operated by electric power. Already about two-thirds of the line is complete, and work is being rushed on the remaining section. The first third has been in operation for a considerable period and the second section is practically complete. The last section is now under construction on Locust Point.

The city is also reclaiming a tract of about 25 acres of land on the Patapsco River. To secure a grade for the railroad and to give bulkhead height to the bed of a street, it was necessary to lower a street grade about 20 feet. To carry an avenue over the line a reinforced concrete bridge is being built to cost about \$34,000. This has two spans of 40 feet each, of flat arch construction, heavily reinforced. On either side of the abutments two rooms will be built for use as either comfort stations or otherwise. The dirt that has been excavated to make the proper grade has been used to reclaim the property on the river. It is proposed to erect a long bulkhead to protect this land.

### Establishing Car and Engine Standards.

Henry Walters, chairman of the board of both the Atlantic Coast Line and the Louisville & Nashville Railroad systems, is working for the Government, in co-operation with W. G. McAdoo, director-general of railroads, for the purpose of establishing standard types and designs of cars and locomotives to be adopted by the railroad administration. Consultations with builders of cars and locomotives have been held and are being held because the subject is a vast one and much consideration of it is necessary to enable the adoption of generally satisfactory designs of equipment for interchange on various lines.

The freight-car standards are to be investigated especially by the car committee, which was appointed last summer, when it was suggested that the Government purchase cars for the railroads. This committee includes S. M. Vaulain of the Baldwin Locomotive Works, W. H. Woodin of the American Car & Foundry Co., J. M. Hansen of the Standard Steel Car Co., N. S. Reeder of the Pressed Steel Car Co. and Clive Runnels of the Pullman Company.

Director-General McAdoo is to appoint another committee to work on locomotive standards.

John Skelton Williams, who has been appointed director of finance and purchases, will organize a staff to conduct the work. Samuel Porcher, purchasing agent of the Pennsylvania Railroad, has been temporarily assigned to assist him in working out a plan for purchasing.

### \$50,000,000 Financing Approved.

At the recent annual meeting of stockholders of the Mobile & Ohio Railroad the proposed \$50,000,000 mortgage was approved to provide for refunding and other financial requirements of the company from time to time.

### Suggestion to Relieve Car Shortage.

The National Coal Association, according to a report from Washington published in the Wall Street Journal February 19, has recommended that all member bodies lend their skilled workmen to the railroads to aid in repairing locomotives and cars which have become crippled owing to either long-continued use or to severe weather. This action was taken, it is said, because it is understood that the regular repair forces of the lines are not sufficiently large to keep up with the repair work. It is believed that adoption of this recommendation would assist very materially in improving the transportation situation.

It is also stated that the National Coal Association has recommended to W. G. McAdoo, Director-General of Railroads, that the lines be no longer permitted to make special assignment of cars to any favored mines. It is alleged that favored mines have, in seasons of car shortage, frequently obtained their full quota of cars, while other mines did not receive all their usual supply.

### Oklahoma as a Big Interurban Field.

J. W. Shartel, vice-president and general manager of the Oklahoma Railway Co., Oklahoma City, according to a report from there, says that extensive interurban railway construction in Oklahoma will be undertaken as soon as the war ends, all of the lines planned under various auspices connecting more or less directly with Oklahoma City, which would be a center of interurban roads in that part of the country. The Oklahoma Railway alone would build from 30 to 40 miles of interurban railway every year. Plans for such extensions have been practically completed, but financing at present is out of the question, and it is doubtful whether materials could be obtained even if the money could be had. An extension of the Guthrie line is to be made to Stillwater and Cushing, about 40 miles, and the Norman line is to be built on to Lexington and Purcell. The proposed road from Oklahoma City to Shawnee is another approved plan calling for 40 miles of road.

### Large Contracts for Ties.

A report from Huntington, W. Va., says that the Chesapeake & Ohio Railway has given a contract to the Mercereau-Hawkins Tie Co. to supply it with all ties necessary this year on its lines west of Clifton Forge. The company has also been awarded a tie contract by the Pennsylvania Railroad. The ties will be made from timber cut in West Virginia, Kentucky and Tennessee.

## MINING

### Consumers' Smokeless Coal Mines.

Gauley River coal land in West Virginia will be developed by the Consumers' Smokeless Coal Co., Charleston, chartered with \$1,400,000 capital. This corporation plans to mine the coal on 45,000 acres, beginning with a 7000-acre tract. J. P. Necessary of Huntington, W. Va.; I. K. Dye of Elkins, W. Va.; J. P. Chapman of East Bank, W. Va., and S. A. Moore of Charleston, W. Va., are among those interested.

### To Mine Virginia Manganese.

Pennsylvania and Virginia capitalists will develop Virginia manganese properties, having chartered the Mineral Ridge Manganese Corporation, with a capitalization of \$250,000. William B. Shaffer of Nazareth, Pa., is president, and Charles F. Nelson of Strasburg, Va., is secretary-treasurer.

### Virginia Marl for Fertilizer.

Virginia marl products for fertilizer will be manufactured by the Claremont Marl Products Co. of Claremont, Va., which has been incorporated with a capitalization of \$250,000. H. J. Arrington of Claremont is president and C. D. Gilliam of Richmond is secretary-treasurer.

## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

### Textile Notes.

Additional machinery will be installed by the Gaston Hosiery Co. of Cherryville, N. C.

The Nims Manufacturing Co., Mt. Holly, N. C., has increased capital from \$74,750 to \$100,000.

An additional brick building costing \$30,000 will be erected by the Louisville (Ky.) Cotton Mills.

Kleson Hosiery Mills, Connellys Springs, N. C., will increase equipment from 75 to 200 knitting machines.

H. B. Craven, J. L. Holman, Bruce Craven and G. B. Craven have incorporated the Ridgecrest (N. C.) Hosiery Mills Co., with \$20,000 capital.

John M. Graham, Columbia, S. C., will install additional new machinery, increasing the daily capacity of his knitting mill to 1000 dozen pairs of hose.

D. R. Mauney, Cherryville, N. C., and associates have organized the Josephine Knitting Mills and will install 20 knitting machines for manufacturing men's half-hose.

The Zebulon (N. C.) Hosiery Mill will establish a branch plant at Raleigh, and has leased a two-story brick building in which to install the equipment of machinery.

E. L. Draper of Charlotte, N. C., has been engaged as consulting landscape architect to plan mill village developments for the Erlanger Cotton Mills of Lexington, N. C.

The Paducah (Ky.) Hosiery Co. has increased capital from \$12,000 to \$24,000. It was mentioned recently as having leased a building and ordered machinery to double capacity.

A 64x54-foot standard brick mill construction addition, costing \$6000, will be erected by the Vivian Cotton Mills of Cherryville, N. C. This addition will be equipped with new machinery, to include 2000 spindles, the cost of this additional equipment being \$55,000.

The Garrou Knitting Mills Co., recently chartered, has organized to consolidate several mills controlled by John L. Garrou and associates. This new corporation's officers are: John L. Garrou, president, Morganton, N. C.; E. P. Tate, vice-president; E. D. Alexander, secretary-treasurer.

H. B. Pattilo, Gastonia, N. C., has received contract to build an addition for the Parkdale Mills of Gastonia. This new structure will provide space for the company's 5000 additional new spindles recently mentioned as having been ordered. The engineer-architect is the Robinson Company of Atlanta, Ga.

All arrangements have been completed for the Hemshaw Hosiery Mills, Oxford, N. C., reported in January. This plant will have an initial installation of knitting machinery, driven by electric power, for an hourly capacity of 12 dozen pairs of hose. It will represent an investment of \$10,000 by H. M. Shaw.

A two-story 100x50-foot addition will be built by the Hickory (N. C.) Hosiery Mills. Plans and specifications are being prepared for this new building, which will be equipped with machinery for a daily capacity of 200 dozen pairs of women's seamless hosiery. This will increase the company's output by 50 per cent.

Contract has been awarded to H. B. Pattilo of Gastonia, N. C., to construct a two-story 300x78-foot mill building and 40 operatives' cottages for the Myrtle Mills of Gastonia. This new corporation's organization with \$500,000 capital was noted last week. Its architect-engineer is the Robinson Company of Atlanta, Ga.

A 301x78-foot additional building has been contracted for by the Cross Cotton Mills Co., Marion, N. C., which company has increased capital to \$300,000. Contract has also been awarded for 4032 ring spindles and accompanying machinery, to be installed in the addition. These increases will provide the plant with a total of 7056 spindles.

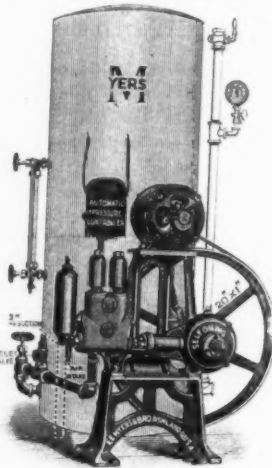
The Davis Hosiery Co., Chattanooga, Tenn., recently mentioned as incorporated with \$25,000 capital, has organized and determined plant details. A building has been leased and contract awarded for 50 automatic knitting machines, etc., for manufacturing, bleaching, dyeing and finishing women's hosiery. J. C. Davis is president; O. M. Davis, vice-president; I. C. Davis, secretary-treasurer.

## MECHANICAL

Illustrations and descriptions having news value pertaining to developments in machinery, mechanical devices and inventions will be considered for use in this department.

### A Convenient House Pump.

A self-oiling house pump, which may be automatically controlled when desired, is shown in the accompanying illustration. It is designed to pump water from shallow wells, cisterns, springs, lakes and other sources, and to force it into pneumatic pressure tanks or open gravity tanks to supply private residences, public buildings, etc. It can be operated with any kind of city electric current or with current supplied by farm lighting and power plants. There is a simple power transmission with few working parts, all fully enclosed and running in oil. The water end has ample and direct waterways and large valves, which produce high efficiency and large pumping capacity with low current cost. All working parts are automatically lubricated by oil splash from the crankcase, except-



HOUSE PUMP WITH ELECTRIC MOTOR.

ing the idler pulley, which has a self-lubricating bushing. The capacity of the pump is 180 gallons per hour.

The specifications are thus: Base, a one-piece iron pedestal with machined pads for pump and motor, making a mounting for the entire equipment and insuring perfect felt alignment. Pump is double-acting. Cylinder is brass, 1 1/4 inches diameter and two-inch stroke. Piston, leather, packed and operated by a brass piston rod. Valves are rubber, on brass seats, of the grid pattern, and are held in position by brass studs fitted with springs for quick closing. Each valve is located in its own valve box, and may be reached by removing the cap immediately over it without disturbing any other connections or fittings. Air chambers are over the discharge valves and eliminate water hammer, and a combined vacuum chamber and priming reservoir steadies the flow of water and insures priming. A relief valve is provided to protect the pump and motor from excessive pressure. Power end of the pump has a seven-eighths-inch diameter pulley shaft, which runs in long, easily renewable bearings located on opposite sides of the eccentric, which operates the connecting rod, that is bronze and adjustable for wear. The crosshead is also bronze, and runs in a bored guide. Motor equipment is a one-sixth horse-power high-duty heavy starting torque motor fitted with a flanged drive pulley, flat, endless, moisture-proof belt and spring belt tightener.

An automatic pressure controller can be supplied with pneumatic tank outfits, by means of which the tank pressure is controlled automatically. An air valve in the end of the cylinder supplies air for the pneumatic tank system.

This pump is manufactured by F. E. Myers & Bro., builders of force and lift pumps, hay tools, etc., Ashland, Ohio.

### A New Drill for Light Work.

A new light-weight, high-power, non-reversible drill, which is especially adapted to light work, has recently been put on the market. It is excellently suited to any drilling or reaming which comes within the limits of its capacity, the limit of drilling being nine-sixteenths inch and the limit of reaming five-sixteenths inch. It weighs 15 pounds and develops a free spindle speed of 1000 revolutions per minute. With drill chuck its over-all length is 14 1/2 inches, and the distance from the side of the drill to the center of the spindle is only 1 1/2 inches, which feature makes it easy to operate in unhandy places. The spindle is threaded to accommodate either

a No. 1 M. T. socket or a drill chuck, and these may be readily interchanged as desired.

The four-piston motor of this drill is very simple, and the convenient accessibility of its reciprocating parts is an advantage; the removal of five cap screws permits the crankshaft assembly to be withdrawn in its entirety. The valve is of the rotary type, and is gear-driven. Roller bearings are used on the connecting rods and



THE DRILL AS IT APPEARS WITH BREAST PLATE

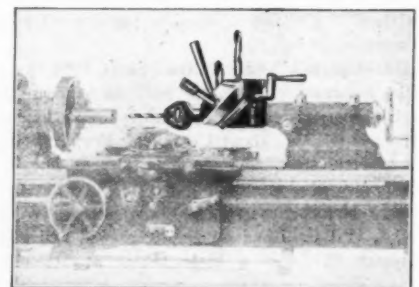
ball bearings are on the crankshaft. The drill may be obtained with either breast plate, spade handle or telescoping feed screw. If the latter, the length of feed measures 2 1/2 inches.

This drill, which is made by the Ingersoll-Rand Company, 11 Broadway, New York city, is known as the No. 5 "Little David," and is the latest addition to its line of that nomenclature.

### A New Multiple Rotary Chuck.

A multiple turret chuck, which the manufacturers claim will convert any ordinary lathe into a turret lathe that will produce the same class of work as is done on the best machines of regular turret lathe type, has been invented and patented. This chuck is applied to the outer spindle of the tailstock and can be attached or removed in 15 seconds. It accommodates five distinct and separate tools.

These tools can be instantly brought into use by a revolving turret head which automatically centers itself when placed in position. Mechanics will appreciate the valuable advantages of a device of this character, as it permits the use of five tools in place of only one tool on an ordinary lathe. With this device attached, any kind



MULTIPLE TURRET CHUCK APPLIED TO LATHE.

of work can be done, such as forming, roughing, boring, finishing, tapping, etc., without stopping the lathe or shifting belts.

Another distinct feature claimed for this attachment is its perfect rigidity and alignment and its ability to withstand strain equal to the tailstock of the lathe itself. It is accurately attached to the smallest or largest-sized lathe made. It is made in three sizes, according to the size of the machine.

This new device as well as other labor-saving attachments for lathes and drill presses, is made by the Newman Manufacturing Co. of Cincinnati, O., which also makes architectural and ornamental brass, bronze and other metal work.



# Construction Department

## IN ORDER TO FOLLOW UP

Properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

### HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be written on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the post-office will generally be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur, as our reports are often published before new companies are known and before they have any established office for the receipt of mail.

### WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

### DAILY BULLETIN

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year.

All advertising contracts in the Manufacturers Record for three months or longer include a subscription to the Daily Bulletin for the contract period, as well as a subscription to the Manufacturers Record.

### BRIDGES, CULVERTS, VIADUCTS

Ala., Dothan.—Houston County Comms. let contract F. M. Dobson of Montgomery, Ala., at \$14,620 to construct concrete bridges, culverts and headwalls on State Trunk Rd. No. 17, between Dothan and Headland; 943 cu. yds. concrete and 28,000 lbs. steel reinforcement in place; W. S. Keller, State Highway Engr., Montgomery.

Ga., Glennville.—Cities of Glennville and Savannah plan to construct bridge across Altamaha River at Sisters Ferry; cost, including repairs to approaches, \$200,000. Address The Mayor.

Miss., Quitman.—Clarke County Supvrs., W. H. Foster, Clk., will erect steel bridge; let contract March 5. (See Machinery Wanted—Bridge.)

Tex., Goree.—Knox County Comms., Benjamin, Tex., let contract to construct \$18,000 bridge across Brazos River.

### CANNING AND PACKING PLANTS

Ark., St. Paul.—Appleby Bros., Fayetteville, Ark., C. W. Appleby, Mgr., will erect ordinary-construction building, cost about \$6000; no contract; has machinery; product, canned goods.

Fla., Fort Gaines.—Fort Gaines Canning Co., capital \$10,000, organized; J. T. Lindsey, Pres.; J. G. Neves, V.-P.; W. C. Kelley, Secy.-Treas.; will build cannery.

Fla., Moore Haven.—Moore Haven Cannery will build plant; first building to be 100x400 ft.; operate under management of Imperial Cannery, Chicago. (Noted in September to be established.)

Fla., Palmetto.—Springstead & Son will rebuild packing plant reported burned.

Ga., Millen.—Millen Canning Co., capital \$10,000, organized; S. C. Parker, Pres.; L. O. Parker, Secy.-Treas.; F. S. Bouyer, Mgr.

Ga., Moultrie.—H. J. Heinz Co., Pittsburgh, Pa., will establish cucumber-salting station.

Ga., Thomasville.—Commercial Association is negotiating with Chicago company to establish cannery.

N. C., New Bern.—J. W. Derickson of Derickson & Martin, Dover, Del., is arranging for establishment of cannery.

Va., Crockett.—John S. Dix & Co. will establish cannery; operation in connection with sauerkraut manufacturing; latter lately noted under Miscellaneous Factories. (See Machinery Wanted—Canning Machinery.)

Va., Front Royal.—Old Virginia Orchard Co., J. B. Harnsberger, Pres.; will enlarge plant to several times present capacity; repair old building; also erect 30x70-ft. 2-story ordinary-construction building; install four 800-gal. wood tanks, steam-jacket kettles, apple corers, quarterers, etc.; steam water pump; smoke stack; labeling machine; juice sterilizer; manufacture apple jelly and jam. (See Machinery Wanted—Canning Machinery; Elevator; Pump; Stack; Kettles.)

### COAL MINES AND COKE OVENS

Ala., Birmingham.—Federal Coal Co., capital \$20,000, inctpd.; Arthur L. Brown, Pres.; A. B. Mitchell, V.-P.; W. A. Lewis, Gen. Mgr.; S. H. Thompson, Secy.-Treas.

Ala., Fayette.—Southern Lumber Co., capital \$50,000, inctpd. by A. M. Grimsley and J. E. Carter.

Ky., Biggs.—Biggs Coal Co., capital \$25,000, inctpd. by E. F. Simms, Otto J. Cox, B. E. Robinson and others, all of Charleston, W. Va.; develop coal mines in Kentucky.

Ky., Barbourville.—Trace Branch Coal Co., capital \$1000, inctpd. by R. N. Jarvis, F. M. Jarvis and Geo. Hutton.

Ky., Indian Bottom.—Rockhouse Coal Co., Second National Bank Bldg., Toledo, Ohio, inctpd.; P. M. McClanahan, Pres.; C. T. Harther V.-P.; S. T. Walcott, Secy.-Treas.; J. P. Cross, Mgr.; develop 700 acres; capacity not estimated. (See Machinery Wanted—Mining Machinery.)

Ky., Martin County.—Warfield Coal Co., capital \$50,000, inctpd. by Wm. Damron and Floyd Breuer of Warfield, Ky., T. A. Shewey of Armor, W. Va., and others; develop coal land in Martin county.

Ky., Meldrum.—Victor Coal Mining Co., Middlesboro, Ky., inctpd., capital \$60,000; Ray Moss, Pres.; J. S. Victor, V.-P.; H. M. Axline, Secy.-Treas.; Frank Ely, Mgr.; develop 400 acres; equipping mines; daily capacity 400 tons.

Ky., Hueysville.—Superior Elkhorn Coal Co., Ashland, Ky., capital \$40,000, inctpd.;

John W. Kitchen, Pres.; F. B. Preston, V.-P.; Sam Porter, Secy.-Treas.; J. O. Johnson, Mgr.; develop 250 acres; daily output 350 tons.

Ky., Whitesburg.—Kingdom Coal Co., Bluefield, W. Va., W. R. L. Craft, Pres.-Mgr., advises Manufacturers Record: Will develop 875 acres; daily output 100 to 800 tons; D. K. Peck, Constr. Engr., Whitesburg. (Lately noted purchasing additional acreage.)

Ky., Wilbong.—United States Coal Mining Co., Chattanooga, Tenn., capital \$50,000, inctpd.; John T. Walter, Chattanooga, Pres.; H. L. Earle, V.-P. and Mgr., Wilbong; T. O. Busbee, Secy.; G. B. Walter, Treas.; developing 1100 acres; minimum output 125 tons.

Okla., Henryetta.—Creek Coal & Mining Co. increased capital from \$100,000 to \$150,000

Tenn., Jellico.—Clarfield-Jellico Co. increased capital from \$15,000 to \$50,000.

Tenn., Nashville.—Phoenix Coal Co., capital \$100,000, inctpd. by P. D. Houston, H. C. Thompson, W. W. McNeilly and others.

W. Va., Charleston.—Star Mining & Fuel Co., capital \$5000, inctpd. by W. A. Dillon, S. L. Campbell, John Bonovitch and others.

W. Va., Charleston.—Frederick Coal & Coke Co., capital \$50,000, inctpd. by Zach Evans, Sr., and Richard Legg of Handley, W. Va., S. A. Lewis and W. W. Lewis of Chelyan, W. Va., and others.

W. Va., Fayette County.—Consumers' Smokeless Coal Co., capital \$1,400,000, inctpd. by Abraham A. Lilly, S. A. Moore and L. A. Tinder, all of Charleston, W. Va., I. K. Dye of Elkins, W. Va., and others; main office in Charleston; develop 45,000 acres coal land now under option on Gauley River in Fayette County; first development 7000 acres near mouth of river, and second 38,000 acres adjoining first tract.

W. Va., Huntington.—Villark Real Estate & Mining Co., capital \$10,000, inctpd. by C. F. Paul, H. C. Whisler, Jas. M. Taber and others.

W. Va., Morgantown.—Greenmont Fuel Co., capital \$25,000, inctpd. by Nat C. Burdette, J. K. Buchanan, Stanley R. Cox and others.

W. Va., Morgantown.—Beall Knob Coal Co., capital \$5000, inctpd. by David Mansberger, Harry R. Law, Jas. S. McClure and others.

W. Va., Murray.—Areford Coal Mining Co. organized; G. Carl Areford, Mgr., 404 F. N. B. Bldg., Uniontown, Pa.; develop 70 acres; daily output 500 tons; has machinery; R. F. McKay, Constr. Engr., Uniontown. (Lately noted inctpd., capital \$30,000.)

W. Va., Williamson.—Pond Creek By-Products Coal Co. organized; S. H. Goodlee, Jr., Pres.; C. B. Earley, V.-P.; W. P. T. Varney, Secy.-Treas.; W. T. Goff, Mgr.; develop 4 acres; initial capacity 40 tons daily; date for opening mining machinery bids not set. (Lately noted inctpd., capital \$50,000.)

### CONCRETE AND CEMENT PLANTS

Va., Roanoke.—Bricks.—John B. Guernsey & Co., R. D. McCaughlin, Purchasing Agent, Strickland Bldg., contemplates installation of machinery to manufacture solid brick, using unground slag and ordinary cement. (See Machinery Wanted—Brick Machines.)

### COTTON COMPRESSES AND GINS

Ark., Newport.—Littleton Bros. will rebuild cotton gin reported burned at loss of \$9000 on building and machinery.

Fla., Dade City.—Dade City Ginnery & Feed Mills will be established by J. P. Howland, Jr.; erect buildings; install gins; feed and grist mills; machinery to cost \$3000. (See Flour, Feed and Meal Mills.)

Ga., Savannah.—Savannah Warehouse & Compress Co. will enlarge plant; additions to include compress shed, fire protection, compress platforms and streets; compress shed will have capacity 15,000 bales uncompressed cotton, enabling handling of 75,000 to 100,000 bales additional annually; fire protection to cost \$60,000; total cost \$200,000.

N. C., Wilson.—Josephus Parker will rebuild ginhouse and sawmill reported burned at loss of \$8000, including cotton, cottonseed and lumber.

Okla., El Reno.—Guthrie Cotton & Oil Co.,

Guthrie, Okla., will rebuild cotton gin reported burned at loss of \$10,000.

Tex., McKinney.—Farmers' Gin Co. will erect cotton gin.

### DRAINAGE SYSTEMS

Fla., Bradentown.—Sugar Bowl Drainage Dist. contract, lately noted let to South Florida Drainage & Construction Co., Arcadia, Fla., calls for 4 canals and ditches, 20-ft. to 4-ft. bottom, 1 to 1 slope; cost \$29,000; Bay City dry land dredge work; drain 17,440 acres in Manatee county; for farming and grazing; Engrs., Craven & Kimmel, Arcadia.

Fla., Dade County.—Comms. Everglades Drainage District, Tallahassee, opened bids to improve and extend Snapper Creek Canal (about 8 mi. south of Miami) to point 12 mi. from Viscayne Bay; appropriation \$100,000; bid of Megathlin & Clark, Miami, retained for further consideration; F. C. Elliott, Ch. Drainage Engr. (Lately noted inviting bids.)

Fla., Fort Lauderdale.—Trustees Everglades Drainage Dist., F. C. Elliott, Ch. Engr., Tallahassee, Fla., engaged Otis A. Hardin of Fort Lauderdale to survey all land in Napoleon B. Broward Drainage Dist., comprising 725,000 acres in Dade and Palm Beach counties, and Southern Drainage Dist., comprising 135,000 acres in Dade county. (Both districts previously described.)

Fla., Miami.—Trustees Everglades Drainage Dist., F. C. Elliott, Ch. Engr., Tallahassee, Fla., engaged Otis A. Hardin of Fort Lauderdale, Fla., to survey all land in Southern Drainage Dist., comprising 135,000 acres in Dade county, and in Napoleon B. Broward Drainage Dist., comprising 725,000 acres in Dade and Palm Beach counties. (Both districts previously described.)

Ga., Fayetteville.—Fayette County Drainage Dist. No. 1 Comms. Lester C. Dickson, Secy., ask bids until March 14 for dredging Camp Creek in Clayton and Fayette counties; 2 lateral ditches to be excavated; main ditch 9½ mi. long, 216,500 cu. yds. excavation; Dodd and McLeary branches, 13,500 cu. yds. excavation and 60 acres clearing; Engr., Knox T. Thomas, 502 Forsyth Bldg., Atlanta, Ga. (See Machinery Wanted—Dredging.)

Miss., Grenada.—Potacocawa Creek Drainage District Comms., C. W. Mullen, Pres., will construct 461,500 cu. yds. earth embankment for levees and excavation for drainage channel in Carroll and Grenada counties; bids received Feb. 25; Morgan Engineering Co., Engr., 608 Goodwyn Institute Bldg., Memphis, Tenn.; superseded recent item. (See Machinery Wanted—Excavation.)

Miss., Philadelphia.—Kentawka Drainage District, J. F. McCaully, Secy.-Treas. (Neshoba Land Co. principally interested), let contract to Good Roads Surfacing Co., Meridian, Miss., to construct 27 mi. canals; floating dredge work; cost \$150,000; drain 15,000 acres in Neshoba County for agriculture; Engrs., Bell & Reading, 612 Audubon Bldg., New Orleans. (Bids lately noted.)

Mo., Palmyra.—Marion County Drainage District, J. T. Hansbrough, Pres., will reclaim 3 main ditches in drainage district comprising 460 acres along Mississippi River and 2 streams which empty into this river; may receive bids in summer or fall.

Mo., Gregory Landing.—Gregory Drainage District, A. J. Ruddick, Pres., advises Manufacturers Record relative to drainage construction: Canals 10 to 50 ft. wide, 5 ditches, levees and pumping plant; cost \$235,000; 2 42-in. pumps, cost \$50,000; has contracted most of the work; drains 8000 acres, near Gregory Landing, in Clark and Lewis counties; lands for agriculture. (Preliminary plans for pumping station, cost \$75,000, lately noted prepared by Edmund T. Perkins Engineering Co., 1210 First National Bank Bldg., Chicago, and 317 Illinois State Bank Bldg., Quincy, Ill., with Supervisors not then decided on type of power.)

### ELECTRIC PLANTS

Ala., Chickasaw.—Chickasaw Utilities Co., inctpd. with \$50,000 capital as subsidiary of Tennessee Coal, Iron & R. R. Co.; Geo. G. Crawford, Pres.; H. C. Ryding, V.-P.; L. T. Beecher, Secy.-Treas.; all of Birmingham.

Fla., Christiana.—Phosphate Mining Co., P. H. Fuller, Gen. Mgr., Nichols, Fla., will rebuild electric-power plant reported burned.

Ga., Atlanta.—City votes Feb. 25 on \$75,000 to install electric generating plant. H. N. Hurt, Ch. of Constr.

Ga., Sandersville.—City will rebuild electric-light and water plant reported damaged by fire at loss of \$10,000. Address The Mayor.

La., Oak Grove.—Town will grant franchise for electric-light plant; 800 population; L. Grathwell, Clerk, will receive propositions. (See Machinery Wanted—Electric-light Plant.)

Mo., Kansas City.—Kansas City Light & Power Co., Jos. F. Porter, Pres., 1500 Grand Ave., increased capitalization from \$4,977,300 to \$10,000,000; building 250,000 K. W. electric plant on Missouri River; 40,000 K. W. for first installation. (Plant details previously reported; Sargent & Lundy, Engrs., 72 W. Adams St., Chicago.)

N. C., Elk Park.—Elk Park Electric Light & Power Co., capital \$25,000, inceptd. by A. P. Brinkley, A. P. Brinkley, Jr., and Hall H. Brinkley.

Okla., Blackwell.—City votes March 5 on \$82,500 bonds to extend electric-light system. Address The Mayor.

Okla., Bristow.—City votes March 12 on \$35,000 bonds to purchase and improve electric-light plant. Address The Mayor. (Lately noted to vote.)

Okla., Kingston.—Kingston Light & Ice Co., G. F. Blethen, Pres. Mgr., will rebuild lately-noted plant by day labor; repair machinery; has plant with daily capacity 10 tons ice and 50 K. W. electricity. (See Machinery Wanted—Electrical Equipment.)

Okla., Prague.—City, Ray Parks, Mayor, will vote on \$45,000 bonds for electric-light and water plants. (Lately noted.)

S. C., Greenwood.—Panola Mill contemplate installing electric lights on streets and in dwellings. (See Road and Street Work.)

Tenn., Nashville.—Rock City Electric Co., capital \$50,000, inceptd. by J. C. Campbell, W. C. Campbell, H. S. Sumner and others.

Tex., Lometa.—F. C. Whitmaire will rebuild electric-light and power plant reported burned at loss of \$5000.

Tex., San Benito.—Commonwealth Water & Light Co., capital \$30,000, organized with John T. Lomax, Pres.; C. D. Cowgill, V.-P.; G. H. Winsor, Secy.-Treas.; W. D. Carpenter, Gen. Mgr.; improving electric-light and water plants. (Lately noted inceptd. with \$50,000 capital.)

### FERTILIZER FACTORIES

Md., Swanton.—State Agricultural Line Board, Annapolis, Md., plans to purchase property and construct plant to crush limestone.

### FLOUR, FEED AND MEAL MILLS

Fla., Dade City.—Dade City Ginnery & Feed Mills will be established by J. P. Howland, Jr.; erect 24x40-ft. and 30x32-ft. 1000 ordinary-construction buildings; install gins, feed and grist mill machinery, cost \$2000. Lately noted. (See Machinery Wanted—Grist and Feed Mills, Etc.)

Okla., Shawnee.—Cash Flour & Feed Co., capital \$10,000, inceptd. by T. F. Allen, M. O. Allen and K. L. Crudup, all of Durant, Okla.

### FOUNDRY AND MACHINE PLANTS

Ark., Texarkana.—Farm Machinery.—Williams Mill Manufacturing Co. organized with J. B. Sedberry, Pres.; H. M. Barney, V.-P.; M. B. Sedberry, Secy.; let contract Harris & Echols of Texarkana to erect plant; concrete; 285x36 ft.; saw-tooth roof; cost, including equipment, \$25,000 to \$30,000. (Lately noted.)

Md., Baltimore.—Transformer House.—Bartlett Hayward Co., Scott and McHenry Sts., will erect transformer-house at Columbia Ave. and Putnam St.; 28x24x9 ft.; Parker, Thomas & Rice, Archts., Union Trust Bldg.; Morrow Bros., Contrs., 1207 Fidelity Bldg.; both of Baltimore.

Md., Baltimore.—Propellers.—American Propeller & Mfg. Co., 233 E. Hamburg St., will erect 2 buildings in addition to structure now under construction at Gittings and Jackson Sts.; one structure to be 15x38 200 ft.; 2 stories; other 18x50 ft.; 2 stories; Edgar H. Mosher, Archt., Covington and Gittings Sts., Baltimore; Colorado Building Co., Contr., Washington, D. C.

Md., Baltimore.—Munitions.—Bartlett Hayward Co., Scott and McHenry Sts., will erect heat-treating plant; 1 story; 165.3x62.2 ft.; brick; plans by Parker, Thomas & Rice,

Union Trust Bldg.; Morrow Bros., Contrs., 1207 Fidelity Bldg.; both of Baltimore. (Other buildings lately noted.)

Mo., St. Louis.—Stoves and Ranges.—Bridge & Beach Manufacturing Co., Valentine and Poplar Sts., purchased 10-acre site on which to build plant; now has 200,000 sq. ft. floor space.

Tenn., Chattanooga.—Shells.—Southern Machine Co. organized; Morrow Chamberlain, Pres.; C. A. Lyerly, V.-P.; J. M. Trimble, Secy.; H. M. Lofton, Mgr.; has purchased machinery; manufacture 6-in. shells; daily capacity 2000. (In Jan. noted organized, capital \$200,000, and to build plant.)

Va., Danville.—Elevators.—Westbrook Elevator Mfg. Co., capital \$75,000, inceptd. to manufacture passenger and freight elevators; succeeds Westbrook Elevator Co.; A. B. Carrington, Pres.; C. G. Holland and W. J. Westbrook, V.-Ps.; E. H. Marshall, Secy.-Treas.

W. Va., New Cumberland.—Castings.—Hancock Foundry & Machine Co. organized; G. L. Bambrick, Pres.; J. J. Huttmacher, V.-P. and Mgr.; H. B. Michener, Secy.; acquired Davis Price Foundry & Machine Co. foundry; daily output 8 tons gray-iron castings.

### GAS AND OIL ENTERPRISES

Ala., Mobile.—Progressive Oil, Land & Development Co., capital \$1,000,000, inceptd. by S. H. Peck (Prop. of Battle House), Walter D. Bellingrath (Pres. Chamber of Commerce), Julius Hammel, L. G. Adams and others; develop oil properties in Mobile and Baldwin counties.

Ky., Frankfort.—Central Petroleum Co., capital \$10,000, inceptd. by D. L. Razelrigg, Frank G. Austin and C. W. Ray.

Ky., Louisville.—Maverick Oil & Gas Co., capital \$10,000, inceptd. by Harry I. Wood of Louisville, W. J. Geary of Lexington, Ky., and others.

La., Edgerly.—Republic Oil & Sulphur Co., Louis B. Jennings, Pres., 52 Broadway, New York, plans to develop 40 acres Calcasieu Parish oil land. (See Mining.)

Louisiana.—Louisiana Southern Oil & Gas Corp., capital \$500,000, inceptd. by F. D. Buck, M. L. Harty and K. E. Longfield, all of Wilmington, Del.

Md., Baltimore.—Gas Storage Tank.—Consolidated Gas, Electric Light & Power Co., Lexington St. Bldg., will erect gas tank in Spring Garden section; capacity 6,000,000 cu. ft.; estimated cost \$500,000; applied to Public Service Commission to issue \$408,000 notes.

Mo., Kirksville.—Luanna Oil & Gas Co., capital \$500,000, inceptd. by John V. McManis, John F. Janisch and Audrey D. Risdon.

Okla., Ardmore.—Kan-O-Tex Oil & Gas Co., capital \$200,000, inceptd. by E. Dunlap, Harold Wallace and Krik Dyer.

Okla., Ardmore.—Oil Refinery.—Ardmore Producing & Refining Co., organized; Wm. A. Rogers, Pres.; L. D. Moore, Secy.; W. J. Hickman, Treas.; build oil refinery of 5000 bbls. daily capacity. (Lately noted inceptd., capital \$200,000, by Joe Williford of Ardmore, and others.)

Okla., Bartlesville.—Herschel Oil & Gas Co., capital \$100,000, inceptd. by Gustave Benheim, N. A. Rubin and Yeon Rubin, all of East Liverpool, Ohio.

Okla., Bristow.—Gasoline.—Bristow Gasoline Supply Co., capital \$2000, inceptd. by Leon Thevenin, C. L. Freeland and R. J. Mills.

Okla., Chickasha.—Washita-Garber Oil & Gas Co., capital \$40,000, inceptd. by J. L. Smith, A. E. Comes and E. E. Alkire of Bradley, Okla.

Okla., Duncan.—Stansell Oil Co., capital \$32,000, inceptd. by J. B. Stansell, J. W. Whisenant and J. W. McCune.

Okla., Oklahoma City.—Oil State Development Co., capital \$25,000, inceptd. by J. M. Cooper and Max P. Stumpff of Oklahoma City, and Guy J. Stumpff of Perry, Okla.

Okla., Tulsa.—Belmont-Willett-Brown Oil Co., 319 Central National Bank Bldg., lately noted inceptd., capital \$250,000, will install piping: 500 ft. 15½ in., 1400 ft. 12½ in., 1800 ft. 10 in. and 2400 ft. 8¼ in. (See Machinery Wanted—Piping, etc.)

Okla., Yale.—Cambria Oil Corp., capital \$1,000,000, chartered by C. S. Goodall, H. C. Brandenburg and J. W. Flint.

Tex., Amarillo.—Miami Electric Oil Co. increased capital from \$30,000 to \$40,000.

Tex., Brownwood.—Richardson Oil Co., capital \$1,000,000, inceptd. by A. H. Richardson, Will J. Scott and Geo. Kidd.

Tex., Gainesville.—Rice Oil & Development Co., capital \$50,000, inceptd. by C. F. Rice and

W. D. Garnett of Gainesville, J. T. Tatum of Aubrey, Tex., and others.

Tex., Houston.—Oil Refinery, etc.—Prairie Oil & Gas Co. will build large oil refinery; Prairie Pipe Line Co., Independence, Kan., subsidiary, will lay oil pipe line from Oklahoma fields to new refinery site.

Tex., Houston.—Oil Refinery, etc.—Magnolia Petroleum Co., subsidiary of Standard Oil Co., will extend oil refinery and pipe-line facilities in Texas.

### ICE AND COLD-STORAGE PLANTS

Ark., Cotton Plant.—Cotton Plant Ice Co. organized; R. J. Huguley, Pres.; H. B. Spencer, V.-P.; both of Newport, Ark.; J. K. Meadow, Secy.-Mgr., Cotton Plant; has plant; manufactures 10 tons ice daily. (Lately noted inceptd., capital \$25,000.)

S. C., Union.—Imperial Ice & Coal Co., capital \$10,000, inceptd.

Tex., El Paso.—Purity Ice-Cream & Cold Storage Co., capital \$7500, inceptd. by Emory E. Fry, W. L. Bary and E. S. Fry.

### IRON AND STEEL PLANTS

Ala., Fairfield.—Steel Plants.—Fairfield Steel Co., inceptd. with \$50,000 capital as subsidiary of Tennessee Coal, Iron & R. R. Co.; Geo. G. Crawford, Pres.; H. C. Ryding, V.-P.; L. T. Beecher, Secy.-Treas.; all of Birmingham.

Tenn., Knoxville.—Electric Steel Furnace.—Tennessee Manganese Co., D. C. Campbell, Pres. (lately noted contemplating construction of \$100,000 furnace), advises Manufacturers Record; Expect to build electric furnace to convert ore into ferro-manganese; at first mine 25 tons manganese daily, and then increase. (See Machinery Wanted—Steel Furnace; Mining Equipment; Crusher.)

Tex., Fort Worth.—Steel Furnaces.—Geo. W. Armstrong & Co. advises Manufacturers Record: No action taken as to plan for installing open-hearth furnaces. (Previously noted.)

W. Va., Charleston.—Projectile Plant.—Bureau of Yards and Docks, Navy Department, Washington, D. C., let contract Rust Engineering Co., 1507 Farmers' Bank Bldg., Pittsburgh, Pa., at \$15,000 to construct reinforced concrete pit for furnace in treatment shop at War Department's \$1,750,000 projectile plant now under construction (Lately invited pit bids.)

### LAND DEVELOPMENTS

Ala., Chickasaw.—Chickasaw Land Co., inceptd. with \$50,000 capital, as subsidiary of Tennessee Coal, Iron & R. R. Co.; Geo. G. Crawford, Pres.; H. C. Ryding, V.-P.; L. T. Beecher, Secy.-Treas.; all of Birmingham.

Ark., Lonoke.—Ozark Farms Co., capital \$6000, inceptd. by Hattie M. Cockrum, Esther Brooks and Vigh Cockrum.

Ala., Mobile.—Arlington Land Co., capital \$5000, inceptd.; W. H. Allen, Pres.; H. N. Van Devander, Secy.-Treas.

D. C., Washington.—Carolina Stock Farms, capital \$200,000, inceptd. by Chas. M. Campell (1343 Harvard St. N. W.), Jas. W. Turner and Halleck D. Fry.

Fla., Tampa.—Artesian Land Co., capital \$250,000, inceptd.; D. C. Gillett, Pres.; L. B. Skinner, V.-P.; C. M. Davis, Secy.; L. A. Bize, Treas.

Fla., Winter Haven.—Winter Haven Land Co., capital \$25,000, inceptd.; W. H. Hampton, Pres.; John L. Fouts, V.-P.; W. F. Hutchinson, Secy.-Treas.

La., Bogalusa.—A. W. Bassett, Dryden, Tex., will develop 81,600 acres land for stock farm; purchased (from Great Southern Lumber Co.) 2600-acre farm and 9000 acres cut-over timber land and leased grazing privileges on 70,000 acres; soon ship 18,000 sheep and several thousand cattle for initial developments.

Mo., Excelsior Springs.—City has plans by Geo. E. Kessler & Co., Landscape Archts., St. Louis, Mo., for system of parkings and boulevards.

N. C., Lexington.—Erlanger Cotton Mills engaged E. L. Draper, 506 Trust Bldg., Charlotte, N. C., as consulting landscape architect for mill-village developments.

N. C., Pomona.—Real Estate & Trust Co., David White, Pres., Greensboro, N. C., will develop 100 acres; general sub-division; details not decided; plans by E. L. Draper, Landscape Archt., 506 Trust Bldg., Charlotte, N. C.

Okla., Pauls Valley.—City voted \$15,000 bonds for park and building. Address The Mayor. (Noted in January.)

Va., Charlottesville.—Highland Live Stock & Orchard Corporation, capital \$50,000, chartered; Edward C. Griggs, Pres., Pittsburgh, Pa.; Arthur M. Gable, Secy., Erie, Pa.

Va., Petersburg.—Boykin Fruit Co., capital \$15,000, inceptd.; E. B. Boykin, Pres., Petersburg; M. F. Bottigheimer, Secy.-Treas., Richmond.

W. Va., Charleston.—East Nitro Land Co., capital \$75,000, inceptd. by E. S. Bock, T. C. Townsend, Ben Moore and others.

W. Va., Charleston.—National Land Co., 912 Quarrier St., inceptd. with \$10,000 capital by J. W. Woodree, L. E. Potet, E. V. Evans and others.

Va., Williamsburg.—Chas. B. Cooke of Richmond, Va., and others purchased 300 acres and will organize company to develop as residential section; J. J. Bolton and R. J. Pratt of Richmond are Suprv. Engrs.

W. Va., Princeton.—Princeton Land Co., capital \$50,000, inceptd. by W. B. Honaker, L. H. Perkins, J. R. Vermillion and others.

### LUMBER MANUFACTURING

Ala., Coxheath.—Coxheath Lumber Co. increased capital from \$15,000 to \$50,000.

Ala., Fayette.—Southern Lumber Co., capital \$50,000, inceptd. by A. M. Grimsley, J. E. Carter and Mrs. A. F. Grimsley.

Fla., Fernandina.—Lofton Land Co., T. G. Ozmer, Mgr., Lofton, Fla., purchased site; construct saw and planing mill and dry kiln; owns long-leaf yellow pine timber tract at Lofton; manufacture rough and dressed lumber; daily capacity 25,000 ft.; has \$10,000 capital.

Fla., Winderwe.—Lake Down Lumber Co., 206 S. Orange Ave., Orlando, Fla., organized, capital \$10,000; O. T. Switzer, Pres.; R. L. Bunch, V.-P.; E. E. Jameson, Secy.; repair second-hand mill; daily capacity, 5000 to 10,000 ft. sawed lumber.

Ga., Savannah.—Keller Timber Co., capital \$1000, inceptd. by Geo. W. Urquhart, J. G. Robertson and others.

Ga., Savannah.—Cherokee Timber Co., 30 Drayton St., organized; E. F. Lovell, Jr., Pres., Savannah Bank & Trust Bldg.; R. W. Farr, Secy.; J. W. Edenfield, Mgr.; will construct sawmill in Chatham county; cost \$3000; day labor; plans for machinery not decided; produce lumber and cordwood. (Lately noted inceptd., capital \$3000.)

Ga., Worth.—Barfield Lumber Co. (John K. Barfield interested) will erect (day labor) 36x220-ft. building; remove machinery from old plant at Alapaha, Ga.; daily capacity 50,000 ft. long-leaf yellow pine. (Under Ga., Sycamore, Mr. Barfield lately noted as purchasing timber, etc.)

Ky., Glasgow.—Old Planing Mill Co. increased capital from \$9000 to \$18,000.

Ky., Louisville.—S. P. Graham Lumber Co., capital \$20,000, inceptd. by S. P. Graham, A. P. Graham and E. P. Graham.

N. C., Pollockville.—Trent River Lumber Co., lately noted increasing capital from \$25,000 to \$100,000, advises Manufacturers Record: J. H. Simmons, Pres.; J. F. Carter, V.-P. and Mgr.; N. T. Leary, Secy.; has 1 plant at Pollockville and 4 above on Trent River; manufactures pine boards and sizes, oak timber for shipbuilding, etc.; capacity 40,000 ft. daily.

N. C., Wilson.—Josephus Parker will rebuild sawmill and ginhouse reported burned at loss of \$8000, including lumber, cotton and cottonseed.

W. Va., Charleston.—Coleman Timber Co., capital \$50,000, inceptd. by C. B. Coleman, B. N. Coleman, V. L. Black and others.

W. Va., Charleston.—Kanawha Valley Lumber Co., capital \$100,000, inceptd. by A. W. Laing, T. J. Robin, C. H. Wetzel and others.

### METAL-WORKING PLANTS

D. C., Washington.—Building Materials.—Southern Building Supply Co., H. R. Eastwood, Pres., 3300 K St. N. W., will enlarge steel department with additional machinery.

### MINING

Ala., Hollis.—Graphite.—Madagascar Graphite Co., 701 First National Bank Bldg., Birmingham, Ala., organized; J. E. Boyette, Pres.-Treas.; C. A. Avant, Secy.; both of Birmingham; W. S. Douglas, V.-P., Russellville; J. W. Barnes, Asst. Secy., Andalusia, Ala.; develop 320 acres; output 15 tons per hour; Constr. Engrs., Douglas & Barr, Birmingham. (See Machinery Wanted—Mining Machinery.)

Ala., Ivalee.—Manganese.—G. W. Heber and N. H. Sewall of Gadsden, Ala., will develop 400 acres manganese property about 4 mi. from Ivalee.



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Ala., Quenelda — Graphite. — Quenelda Graphite Corp. Inctd., capital \$3,000,000, by J. F. Berry Baugh, Birmingham, Ala.; J. Disbrow Baker, J. P. Murray, both of Philadelphia, Pa.

Ala., Lineville — Graphite. — Liberty Graphite Co., Steiner Bank Bldg., Birmingham, Ala.; Leo K. Steiner, Pres., and Harry Watkins, Mgr., develops 78 acres; daily output 150 tons; has machinery. (Lately noted increasing capital from \$2000 to \$200,000.)

Fla., Brookside — Phosphate. — J. B. Porter, Buffalo, N. Y., representing Buffalo and Chicago capitalists, purchased 3000 acres Citrus and Hernando County phosphate land, including Citrus Queen property 8 mi. from Brooksville; will develop; W. M. Brooks, Tampa representative.

La., Belle Isle — Sulphur. — Republic Oil & Sulphur Co., organized with \$2,000,000 authorized capital; Louis B. Jennings, Pres.-Mgr., 52 Broadway, New York; Winfield A. Huppach, V.-P., Hudson Falls, N. Y.; Francis J. Canova, Secy., New York; develop 2800 acres sulphur and oil land; plans to install steam power station, compressed air machinery, pumps, storage tanks, cranes, etc., for sulphur mining.

Okla., Commerce — Lead and Zinc. — Big Seven Lead & Zinc Co., J. W. Gillum, Pres., Erick, Okla., increased capital from \$100,000 to \$200,000; plans to purchase and develop additional mining property.

Okla., Commerce — Lead and Zinc. — J. A. Webb of St. Louis, Okla., will build concentrating plant.

Okla., Miami — Lead and Zinc. — Big Vein Lead & Zinc Co., capital \$250,000, Inctd. by W. A. Doty of Miami, G. B. Grumblin and J. A. Utterback of Oklahoma City, Okla.

Okla., Oklahoma City — Lead and Zinc. — United Lead & Zinc Co., capital \$50,000, Inctd. by L. B. Grant, R. B. Halliburton and W. C. Brissey.

Okla., Oklahoma City — Lead and Zinc. — Liberty Mining & Royalty Co., capital \$150,000, Inctd. by Jas. T. Kelley, J. L. Mitchell and T. T. Matlock.

Okla., Picher — Lead and Zinc. — Bendene Mining Co., Oklahoma City, will build concentrating plant.

Okla., Quapaw — Lead and Zinc. — Daniel Boone Mining Co., capital \$150,000, Inctd. by Chas. H. Birt of Muskogee, Okla., J. E. Jenkins of Springfield, Mo., and All Avery of Oronogo, Mo.

Okla., Ravia. — Oil Creek Mining Co., capital \$15,000, Inctd. by J. C. Wadsworth of Ravia, C. S. Renegar of Nebo, Okla., and W. H. Vehmeyer of Dallas, Tex.

Tenn., Sevierville — Manganese. — Tennessee Manganese Co., D. C. Campbell, Pres., Knoxville, Tenn., plans installation equipment for daily output 25 tons ore and then increase; ores at foot of Big Smoky Mountains, 12 mi. from Sevierville, on east fork of Pigeon River. Lately noted planning this development and contemplating construction of furnaces. See Iron and Steel Plants. (See Machinery Wanted—Mining Equipment; Crusher; Steel Furnace.)

Tex., Burnet — Graphite. — Burnet Texas Graphite Co., capital \$62,500, Inctd. by P. B. McCabe of Burnet, W. B. Garrett of Austin, Tex., and C. J. Price of Topeka, Kan.

Va., Claremont — Marl Products. — Claremont Marl Products Co., capital \$250,000, Inctd. by H. J. Arrington, Pres., Claremont; C. D. Gilliam, Secy.-Treas., Richmond.

Va., Stanley — Ochre. — Walline Ochre Corp., capital \$50,000, chartered; Geo. C. Bratt, Pres.; Wilbur E. Lawrence, Secy.-Treas.; both of Grand Rapids, Mich.

Va., Strasburg — Manganese. — Mineral Ridge Manganese Corp., capital \$250,000, chartered; Wm. B. Shaffer, Pres., Nazareth, Pa.; Chas. F. Nelson, Secy.-Treas., Strasburg.

## MISCELLANEOUS CONSTRUCTION

Fla., Lake Worth — Sea Wall. — City will construct seawall at Lake Worth; secured Government permit. Address The Mayor.

La., Marksville — Dipping Vats. — Avoyelles Parish Police Jury let contract to Miles & Moore, Bunkie, La., to construct 25 dipping vats. (Lately noted to construct dipping vats, cost \$10,000.)

Miss., Gulfport — Filling. — City Commrs. let contract Callahan Construction Co. at \$10,000 for filling in of marsh adjacent to Naval Training Station; 1333 lin. ft. wooden box drain and 44,000 yds. sand fill (hydraulic dredge); Hobart D. Shaw, City Engr. (Lately noted inviting bids.)

Tex., Galveston — Bulkhead. — Galveston County Commrs. let contract M. C. Bowden

of Galveston at \$8859.04 to construct seawall bulkhead from 22d to 24th St.; Geo. E. Mann, County Judge.

Va., Richmond — Dredging. — Government will dredge James River at Richmond; remove freshet deposits from 2450 lin. ft., out of 2900 lin. ft. of improved channel, where depth is less than 16½ ft., so as to restore this depth with bottom widths originally excavated; estimated cost \$44,000; bids received at U. S. Engr. Office, Norfolk, until March 18; further information from U. S. Engr. Office, 316 Federal Bldg., Richmond. (Lately noted as inviting bids.)

Va., Yorktown — Wharf. — Bureau of Yards and Docks, Navy Dept., asks bids until March 11 for fuel-oil wharf, 500 ft. long by 40 ft. wide, with approach 2100 ft. long, 20 ft. wide; timber on cross-ties piles, braced with cross-ties timber. (See Machinery Wanted—Wharf.)

## MISCELLANEOUS ENTERPRISES

Ala., Mobile — Grain Elevator, etc. — Mobile & Ohio R. R. let contract Hancock, Harbin & Hancock of Mobile at \$15,000 to build conveyor for grain elevator; length of conveyor, 650 ft.; rubber belt 36 in. wide to convey grain; hourly capacity, 15,000 bu.; elevator will be equipped with electrically operated machinery and have capacity 250,000 bu. grain; installation of elevator machinery under direction of R. C. Stone Engineering Co., 329 Merchants Exchange Bldg., St. Louis; Jett Muths Construction Co. of Mobile has contract to erect pierheads for pier No. 7 on which conveyor is located, and is proceeding with erection; construction work under supervision of B. A. Wood, Chief Engr. Maintenance of Ways and Structures. (Further facts noted in January.)

Ark., Jonesboro — Printing. — Riley Printing Co., 239 Union St., organized; F. H. Watson, Pres.; L. B. Riley, V.-P.; Robt. A. Sammons, Secy.-Mgr.; has building; commercial printing; deal in office supplies. (Lately noted Inctd., capital \$10,000.)

D. C., Washington — Engraving and Printing. — Government let contract Boyle-Robertson Construction Co., Evans Bldg., Washington, at \$41,883 to erect addition to Bureau of Engraving and Printing.

Fla., Avon Park — Cattle. — Bridges Cattle Co., capital \$300,000, Inctd.; C. A. Skipper, Pres.; D. L. Skipper, V.-P.; C. E. Lanier, Secy.-Treas.

Fla., St. Andrew — Publishing, etc. — Panama City Publishing Co. (G. M. West, Panama City or St. Andrew, and L. C. West) will erect lately-noted printing plant; 40x70-ft. brick building; cost \$3000; 13-in. walls; slate-asbestos roof; material purchased; no contract; prints 3 weekly newspapers, book and job work.

Ga., Fitzgerald — Potato Curing. — Union Cotton Co., C. A. Newcomer, Gen. Mgr., will erect potato-curing plant; capacity 20,000 bu.

N. C., Wilmington — Fisheries. — Fisheries Products Co., authorized capital \$2,000,000, Inctd. by Thos. W. Davis and H. B. Thierian of Wilmington, and Thos. H. Hayes of New York; continues and will enlarge established plant; plans to double fleet of 12 fishing steamers and treble capacity of manufacturing plant; new charter provides for handling of food fish in addition to menhaden used for oil and fertilizer.

N. C., Wilson — Dairy. — Atlantic Christian College will establish commercial dairy, with 60 cows.

Okla., Blackwell — Fire Equipment. — City votes March 5 on \$15,000 bonds to purchase fire equipment. Address The Mayor.

Okla., Okmulgee — Construction. — W. C. Hedrick Construction Co., capital \$50,000, Inctd. by Harland Read, A. W. Anderson and W. C. Hedrick.

Okla., Pauls Valley. — City voted \$3000 bonds for fire department. Address The Mayor.

Okla., Tulsa — Carr-Broach Co., capital \$100,000, Inctd. by Mark E. Carr, L. F. Broach and David B. Wolven.

S. C., Columbia — Hardware. — Luther Hardware Co., capital \$10,000, Inctd.; W. M. Gibbs, Jr., Pres.; E. G. Jones, V.-P.; O. P. Goyal, Secy.; I. M. Mauldin, Treas.

S. C., Greenville — Publishing. — Baptist Courier Publishing Co. increased capital from \$15,000 to \$30,000.

S. C., Greenville — Floral. — Maulding Floral Co., capital \$20,000, Inctd. by Thos. S. Maulding, Chas. F. Hard and H. H. Towne.

S. C., Newberry — Laundry, etc. — Sanitary Cleaning Co., organized; M. G. Sheppard, Pres.-Mgr.; S. E. Sheppard, Secy.; will install laundry, dryroom and steam pressing machines. Lately noted Inctd., capital \$3000. (See Machinery Wanted—Laundry Machinery; Boilers; Wagon; Motors.)

S. C., Orangeburg — Electrical. — Woodward-Wiggins Electric Co., capital \$3000, Inctd. by L. J. Woodward and J. C. Wiggins.

S. C., Spartanburg — Milk Pasteurization. — M. L. Coster and L. M. Pearson placed order for milk-pasteurizing plant equipment, noted in January; daily capacity 800 gals.

Va., Charlottesville — Livestock. — Highland Live Stock & Orchard Corporation, capital \$50,000, chartered; Edward C. Griggs, Pres., Pittsburgh, Pa.; Arthur M. Gable, Secy., Erie, Pa.

W. Va., Charleston — Crushed Stone. — Charleston Crushed Stone Co., capital \$25,000, Inctd. by N. W. Julian, L. W. Abraham, Andrew S. Youngman and others.

## MISCELLANEOUS FACTORIES

Ala., Birmingham — Medicine. — Sulfiron Medicine Co., capital \$25,000, Inctd.; Arlie Barber, Pres.; A. M. Waples, V.-P. and Gen. Mgr.; J. T. Barksdale, Secy.-Treas.

Ark., Fort Smith — Glass Products. — Arkansas Glass Products Co. increased capital from \$40,000 to \$75,000.

Fla., Daytona — Bakery. — Alphabet Baking Co., capital \$40,000, Inctd.; John Nicholson, Pres.; Harry E. Quig, V.-P.; Donald Nicholson, Secy.-Treas.

Fla., Miami — Tents and Awnings. — Miami Tent & Awning Co., capital \$2000, Inctd. by Walter H. Light, A. G. Holmdale and E. W. Holmdale.

Fla., Tampa — Saberton Mfg. Co. increased capital from \$25,000 to \$50,000.

Ky., Paducah — Ice Cream. — Traxel-Glascock Dairy & Ice Cream Co., capital \$12,000, Inctd. by W. L. Traxel, A. L. Glascock, L. G. Maltby and others.

Md., Stump Point — Poisonous Gas. — War Department, Washington, D. C., will build plant to manufacture poisonous gas for American army in France; purchase 1000-acre site; expend several million dollars for site, plant buildings, machinery, dwellings, electric-light system, water supply, sewers, etc.

Md., Perryville — Ammonium Nitrate. — Atlas Powder Co., Wilmington, Del., let general contract to F. T. Lay Construction Co., Springfield, Mass., to build ammonium nitrate plant; includes reinforced concrete and steel buildings to cost \$150,000. (Atlas Powder Co. lately noted as follows: As agent of United States, purchased 500 acres land on Susquehanna River and Chesapeake Bay; build plant to manufacture ammonium nitrate for explosives; has plans and specifications; build several hundred dwellings for employees; construct road and sidewalks; provide electric-light service, water supply, sewer system and other industrial city facilities; employ 3000 men to complete buildings and install plant machinery by July 1; expend several million dollars.)

Mo., Carthage — Shoes. — Wm. Kaut organized \$75,000 company to build shoe factory.

N. C., Concord — Cotton-mill device. — Stegall-Manness Co. Inctd. by W. F. Stegall of Chester, S. C., and others to manufacture device for covering checking motion for looms.

N. C., Goldsboro — Bottling. — Pepsi-Cola Bottling Works, capital \$10,000, Inctd. by H. Z. Bogue of Goldsboro, G. R. Denton of Fremont, N. C.; R. J. Corbitt and E. V. Bunn of Henderson, N. C.

N. C., Raleigh — Bakery, etc. — State Hospital for Insane, Albert Anderson, Supt., Dix Hill, Raleigh, will erect building for bakery, kitchen, butcher shop, etc.; heating, elevator and other equipment; bids until March 14; drawings and specifications from Harry Barton, Archt., Greensboro, N. C. (See Machinery Wanted—Heating Plant; Elevator.)

Okla., Oklahoma City — Bakery. — Royal Baking Co. will install brick oven costing \$2000.

Okla., Oklahoma City — Cleanser. — Universal Cleaner Co., 446 Oklahoma Bldg., J. E. Watts, Pres., and F. E. Wakefield, Mgr., lately noted increasing capital from \$100,000 to \$200,000, occupies building at 300 E. 1st St.; install boxmaking machinery, soap-manufacturing devices, floor sweep mixers, etc.; volcanic ash product capacity 20,000 to 40,000 boxes daily; machinery bids mainly in.

Okla., Tulsa — Insect Powder. — Hofstra Mfg. Co. increased capital from \$5000 to \$100,000.

S. C., Charleston — Bottling. — J. S. Farnum Co., capital \$30,000, Inctd. by Jas. S. Farnum, H. Wilken, C. W. Busch and A. S. Kulluski.

S. C., Charleston — Beverage. — Alco-Pill Mfg. Co., capital \$3000, Inctd. by Peter S. March, Casper D. Quince and Newton A. Monto.

S. C., Greenville — Paper. — Greenville Paper Co., capital \$10,000, Inctd. by E. L. Atkinson of Aiken, S. C., and W. E. Atkinson of Orangeburg, S. C.

Tenn., Memphis — Infant's Shoes, etc. — Memphis Shoe & Trimming Co., capital \$100,000, organized with Jas. F. Knowlton, Pres.; Julius S. Knowlton, Secy.-Treas.; both of Grand Rapids, Mich.; Wm. J. Plant, Gen. Mgr., Grand Rapids, Mich., and Rochester, N. Y.; establish plant; negotiating for lease on factory building; install machinery for daily capacity 400 pairs infant's shoes, 30,000 leather washers and 700 lbs. mattress tufts; also produce shoe parts for factories in other cities; consolidates two Grand Rapids' and one Rochester factory.

Tex., El Paso — Ice Cream. — Purity Ice Cream & Cold-Storage Co., capital \$7500, Inctd. by Emory E. Fry, W. L. Bary and E. S. Fry.

Tex., Waco — Bakery. — Frank Keton is having plans prepared by Birch & Easterwood, Waco, for \$20,000 concrete building for bakery; 27½x155 ft.; 2 stories and basement; tar and gravel roof; cement floor; steam heat; electric lights; freight elevator.

Tex., Dallas — Bottling. — Texas Parafay Co., capital \$50,000, organized with Louis A. Boli, Jr., Pres. and Gen. Mgr.; Ed. A. Lucas, V.-P.; W. C. Schaulin, Secy.; build bottling plant; 1 story; 120x150 ft.; concrete; cost \$20,000; install automatic machinery (ordered); daily capacity 45,000 bottles or 2000 cases; let building contract to S. S. Self of Dallas.

Tex., Houston — Bakery. — Texas Bread Co., Taylor and Railroad Sts., let contract J. Stadler to erect addition; brick; cost \$17,000.

Tex., Waco — Batteries. — Central Texas Battery Co., capital \$5000, Inctd. by W. H. Earle, G. B. Rogers and W. D. McNear.

Tex., Weatherford — Peanut Products. — J. R. Fleming & Co., Fort Worth, Tex., and others will establish peanut products factory; purchased factory buildings; will remodel and equip. (J. R. Fleming & Co. and associates are Fort Worth capitalists lately noted to have purchased buildings for peanut products plant.)

Va., Culpeper — Bottling. — Piedmont King Cola Bottling Corporation, capital \$25,000, chartered; C. A. King, Pres., Culpeper; M. L. Wrenn, Secy., Weyers Cave, Va.

Va., Lynchburg — Bakery. — Lynchburg Steam Bakery will erect building at 12th and Clay Sts.; 2 stories and basement.

Va., Richmond — Glass. — American Glass Works increased capital from \$60,000 to \$250,000.

Va., Roanoke — Cigars. — National Cigar Co., capital \$10,000, Inctd.; Adam Glesen, Pres.; Geo. Glesen, Secy.

## MOTOR CARS, GARAGES, TIRES, ETC.

D. C., Washington — Garage. — Southern Building Supply Co., H. R. Eastwood, Pres., 3200 K St. N. W., will erect garage in connection with office and warehouse buildings.

Ga., Atlanta — Fire Department. — City votes March 25 on \$125,000 bonds to motorize fire department. H. N. Hurt, Ch. of Constr.

Ga., Savannah — Garage. — J. C. Lewis Motor Co., Oglethorpe and Barnard Sts., will erect addition for storage and repair work; 2 stories; 63x90 ft.; provide 25,000 sq. ft. floor space; cost \$15,000; awarded contract A. A. Artley Co., Savannah.

Md., Baltimore — Garage. — F. A. Merchon, Norfolk, Va., let contract Hicks, Tase & Norris, 196 W. Madison St., Baltimore, to remodel Casino on North Ave. as garage; plans by Blanke & Zink, 835-837 Equitable Bldg., Baltimore. (Lately noted.)

Md., Baltimore — Garage. — Cityco Realty Co., 2 E. Lexington St., has plans by F. E. Beall, 306 St. Paul St., Baltimore, for garage at Hillside and Park Heights Aves.; 2 stories; 50x130 ft.

Md., Hagerstown — Steel Automobile Wheels. — Imperial Auto Wheel Co., 7 Court Place, organized; Victor Carter West, Pres.; W. W. McCauley, V.-P. and Secy.; erect fire-proof factory building; 1 story; 12,000 sq. ft. floor space; install machinery, cost \$10,000, for manufacturing and finishing fine steel and polishing work, also lathes and automatic machinery; make steel wheels with resiliency in spokes on coiled springs internally constructed. (See Machinery Wanted—Motors; Building Materials; Machine-shop Equipment.)

Mo., St. Louis — Garage, etc. — R. E. Burdeau Co., 221 Locust St., let contract to T. J. Ward Construction Co., 1819 Olive St., St. Louis, to erect automobile showroom, office and garage; 100x125 ft.; reinforced concrete; composition roofing; tile and granitoid floors; cost without mechanical equipment,

\$50,000; steam heat; electric lighting; electric freight elevator; plans by Preston J. Bradshaw, International Life Bldg., St. Louis.

Okla., Durant—Automobiles.—Finley Motor Car Co., capital \$25,000, inceptd. by C. H. Finley, R. H. Farnham and Lacy Grimes.

Okla., Nowata—Garage.—C. W. McHenry of Nowata, and R. C. Mott of Bartlesville, Okla., contemplate erecting garage.

S. C., Greenwood—Automobiles.—Smathers Motor Car Co., capital \$10,000, inceptd. by J. R. Smathers and J. P. Abney.

S. C., Hartsville—Automobiles.—McKinnon & McNair Motor Co., capital \$10,000, inceptd. M. S. McKinnon, Prest.; A. M. McNair, V.-P.; J. R. McAlpine, Jr., Secy.; W. B. Young, Mgr.; has building; cost of equipment to be installed not decided.

Tex., Lometa—Garage.—W. M. Sonneman let contract J. F. Drew & Son, Lometa, to erect garage; brick; cost \$1000.

### RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Fla., St. Augustine.—Florida East Coast Rwy., E. Ben Carter, Chief Engr., St. Augustine, will rebuild paint shop reported burned at loss of \$85,000, including 4 coaches.

Md., Hagerstown.—Western Maryland Rwy., H. R. Pratt, Chief Engr., Baltimore, erect wheel shop; let contract Price Concrete Construction Co., Maryland Trust Bldg., Baltimore.

### ROAD AND STREET WORK

Ala., Selma.—City, W. O. Crisman, City Engr., let contract to R. L. Ellis, Selma, to construct 6000 ft. concrete curb and 12,000 sq. yds. sidewalks; \$18,000 available. (Bids lately noted.)

Ark., Ashdown.—Little River County Commissioners have plans by State Highway Department, Little Rock, for gravel highways costing \$272,723.52; connect Ashdown, Foreman, Mill Ferry and Lewis Ferry; distance 70 mi.

Ark., Corning.—Clay County Commrs. have plans by State Highway Com., Little Rock, for road from Rector south; 32.7 mi.; cost \$157,318.34.

Ark., Greenwood.—Sebastian County Commissioners have plans by State Highway Com., Little Rock, for Greenwood road north; length 15 mi.; cost \$84,409.62.

Ark., Newport.—Jackson County Commrs. have plans by State Highway Com., Little Rock, for road from Newport to Schoffner and Tupelo; 28 mi.; width 12 ft.; gravel; cost \$105,217.13.

Fla., Bradentown.—Manatee County, Palmetto Special Road & Bridge Dist., W. M. Taylor, Clk., rejected bids for construction of roads and bridges; \$190,000 available; Chas. S. Hill, Engr. Palmetto, Fla. (Bids lately noted for Feb. 11 on 33 mi. lard surfaced road.)

Fla., Dade City.—City, A. F. Price, Prest., City Council, will expend \$12,000 (\$5000 bonds, and \$7000 assessments) to construct asphalt paving, cement curbing and gutters; 1000 lin. ft., 30 and 40 ft. in width; date of opening bids not set; Engr. Knight of Tampa, Fla., in charge. (Bonds lately noted voted.)

Fla., De Land.—Volusia County voted \$200,000 bonds to construct link in Tampa-Jacksonville Road. Address County Commrs. (Noted in December as to vote.)

Ga., Atlanta.—City, H. L. Collier, Chief of Construction, let contract to Pitman Construction Co., Atlanta, to pave 7000 yds.; \$25,000 available. (Bids lately noted.)

Ga., Atlanta.—Fulton County will pave Peachtree Road from city limits to Bulkhead with concrete, bituminous concrete, vitrified brick or patented pavement; 4 sections of 15,000 yds. each; bids until March 23; C. M. Holland, Purchasing Agent, 537 Courthouse. (See Machinery Wanted—Paving.)

Ky., Jenkins.—City, L. B. Abbott, City Engr., let contract to Phelps-Post-Guyon Co., Lexington, Ky., to construct 4500 sq. yds. concrete street pavement and 9100 sq. ft. sidewalk. (Lately noted.)

Mo., Excelsior Springs.—City has plans by Geo. E. Kessler & Co., Landscape Archts., St. Louis, Mo., for system of boulevards and parkings.

Md., Mount Airy.—City plans to issue bonds for street improvements. Address The Mayor.

Mo., Pleasant Hill.—City will pave First St. with macadam; Shockley Engineering Co., Engr., 1222 Askew Ave., Kansas City, Mo.; bids until Mch. 4.

S. C., Greenwood.—Panola Mills contemplate constructing cement sidewalks in mill village, grading streets and installing electric lights on streets and in dwellings.

Tex., Corsicana.—Navarro County will construct road in Road District No. 1; W. E. Slaughter, County Auditor, received bids until Feb. 25; Chas. Chappell, Engr., Sunlight Bldg., Corsicana.

Tex., Crockett.—Houston County, Road District No. 7, is reported to vote March 2 on \$50,000 bonds to construct roads. Address County Commrs.

Tex., Crockett.—Houston County Road Dist. 4 and 6 will construct 40 mi. sand clay roads; \$75,000 available; Engr., H. S. Wilder, Houston, Tex. (Bonds lately noted voted.)

Tex., Oakville.—Live Oak County, W. W. Caves, County Judge, will construct 75 mi. graded dirt roads, with culverts, etc.; \$70,000 bonds available.

Tex., Jourdanton.—Atascosa County, Puget Sound to Gulf Highway, District No. 4, voted \$250,000 bonds to construct Puget Sound Highway through county and improve tributary roads. Address County Commrs. (Lately noted to vote.)

Tex., Lufkin.—Angelina County voted bonds to construct road from Lufkin to Angelina River; also plans another election on bonds to construct road from Renfro Prairie to Lufkin. Address County Commrs.

Tex., Quanah.—Hartman County will not vote, at present, on lately-noted bonds for road construction.

Tex., Wichita Falls.—Wichita County Commissioners let contract Womack Construction Co., Sherman, Tex., to construct 108 mi. of gravel roads; J. E. Crockett, County Engr., Courthouse; E. P. Walsh, County Auditor. (Lately noted inviting bids.)

W. Va., Wayne.—Wayne County Commrs., Blake Taylor, official in charge, Williamson, W. Va., ordered vote March 29 on \$1,090,000 bonds to construct road connecting Cabell and Mingo County lines; brick on concrete or macadam; 39 mi.; G. M. Johnson, Engr.

### SEWER CONSTRUCTION

Ark., Texarkana.—Cities of Texarkana, Ark., and Texarkana, Tex., let contract Ralph G. Taylor of Texarkana, Ark., at \$128,937.51 to construct joint sewage-disposal plant; also let contract to Fairbanks-Morse Co. of St. Louis at \$592 for machinery, including pumping equipment; total estimated cost \$136,000; plant will consist of 2 settling tanks, 2 sprinkling filters, 2 sludge beds and 2 pumping stations, including appurtenances; L. T. Peden, Const. Engr., 2204 Chartres St., Houston, Tex. Mr. Taylor was lately noted as lowest bidder. (See Machinery Wanted—Valves; Lead; Pipe, etc.; Millwork.)

Ga., Macon.—City contemplates \$300,000 bond issue to complete sanitary sewer system; Glen Toole, Mayor.

Md., Hurllock.—City contemplates constructing sewer system. Address The Mayor.

Mo., Kansas City.—City let contract W. C. Mullins of Kansas City at \$94,430 to construct second section of Town Fork sewer; contract for first section (segment block sewer) was lately noted let to Dunnegan & Briggs of Kansas City at \$80,635.90; contract for third section will be awarded later.

Okla., Quapaw.—Town votes March 14 on \$22,500 bonds to construct sewer system. A. G. Sweezy, Town Clerk.

Okla., Pauls Valley.—City voted \$25,000 bonds for sewer system and water-works. Address The Mayor. (Noted in Jan.)

Tex., San Antonio.—City contemplates constructing sanitary sewer down Alazan Creek; cost \$10,000 to \$12,000; H. Helland, City Engr.

Tex., Texarkana.—Cities of Texarkana, Tex., and Texarkana, Ark., let contract Ralph G. Taylor of Texarkana, Ark., at \$128,937.51 to construct joint sewage-disposal plant; L. T. Peden, Const. Engr., 2204 Chartres St., Houston, Tex. (See Ark., Texarkana.)

### SHIPBUILDING PLANTS

Ga., Savannah—Mine Sweepers.—The Foundation Co., Woolworth Bldg., New York, has plans and specifications for shipyards; appointed Chas. R. Scott as Savannah manager; begun construction of frame office buildings, dormitories for workmen, mainline railway and temporary docking facilities; plant site fronts 2700 ft. on Savannah River; construct mine sweepers for French Government. (Lately noted purchasing site, having contract for 26 mine sweepers, etc.)

Tex., Galveston.—Steel and Wooden Ships. Galveston Dry Dock & Construction Co. or-

ganized; J. H. Langbehn, Prest.; T. J. Anderson, Const. Engr.; will build \$850,000 floating dry dock of 10,000 tons capacity, in accordance with Government contract; dock 600x110 ft.; wooden pontoons and steel wings; 2 sections of 6000 and 4000 tons capacity bolted together; employ 800 men during construction and 600 when completed; finish in 7 months; plans and specifications by Wm. T. Donnelly, Dry Dock Engr., New York; site on Pelican Island; plans accompanying improvements and additional facilities costing several hundred thousand dollars; these to include machine works, carpenter shop, repair plant, dredging, etc.

### TELEPHONE SYSTEMS

Ga., Canton.—Canton Telephone Co. increased capital from \$2850 to \$10,000.

Okla., Kingfisher.—Telephone Company will erect exchange.

### TEXTILE MILLS

Ga., Atlanta.—Cotton Cloth.—Fulton Bag & Cotton Mills wire Manufacturers Record: Contemplate increase of capital from \$600,000 to \$2,000,000; no immediate changes.

Ky., Louisville.—Cotton Products.—Louisville Cotton Mills will erect additional brick building costing \$30,000.

Ky., Paducah.—Hosiery.—Paducah Hosiery Co. increased capital from \$12,000 to \$24,000. (Lately noted to double plant, having leased building and ordered additional machinery.)

N. C., Cherryville.—Men's Hosiery.—Gaston Hosiery Co., N. B. Kendrick, Prest., plans to install additional machinery; knit men's half hose.

N. C., Cherryville.—Cotton Cloth.—Vivian Cotton Mills will build 61x54-ft. standard-brick mill-construction addition, costing \$6000; install additional new machinery, including 2000 spindles, costing \$55,000.

N. C., Cherryville.—Men's Hosiery.—Josephine Knitting Mills organized by D. R. Mauney and others; install initial equipment of 20 machines to knit men's half hose; use hosiery yarns, 18s to 30s, single.

N. C., Connelly's Springs.—Hosiery.—Kilson Hosiery Mills will add 125 knitting machines.

N. C., Gastonia.—Hosiery Yarn.—Myrtle Mills let contract to H. B. Patillo, Gastonia, to H. B. Patillo, Gastonia, to construct 2-story 300x78-ft. cotton-mill building with first floor of tar concrete; also for 40 cottages; Robinson Company, Archt.-Engr., Atlanta, Ga. (Lately noted organized with \$500,000 capital, etc.)

N. C., Gastonia.—Cotton Yarn.—Parkdale Mills, J. Lander Gray, Prest., let contract to build addition for 5000 spindles; Robinson Company, Archt.-Engr., Atlanta, Ga. (Lately noted as having ordered 5000 additional spindles.)

N. C., Hickory.—Hosiery.—Hickory Hosiery Mills having plans prepared for addition; 100x50 ft.; 2 stories; install additional machinery for daily output 200 dozen pairs women's seamless hosiery, being increase of 25 per cent. of total capacity.

N. C., Marion.—Cotton Yarn.—Cross Cotton Mills Co. increased capital to \$300,000; let contract for erection 301x78-ft. additional building; install 4032 ring spindles and accompanying looms; ordered this machinery.

N. C., Mt. Holly.—Cotton Yarn, etc.—Nims Mfg. Co. increased capital from \$74,750 to \$100,000.

N. C., Ridgecrest.—Hosiery.—Ridgecrest Hosiery Mills Co. chartered with \$20,000 capital by H. R. Craven, J. L. Holman, Bruce Craven and G. B. Craven.

N. C., Raleigh.—Hosiery.—Zebulon Hosiery Mill, Zebulon, N. C., will establish branch plant; leased 2-story brick building.

N. C., Valdese.—Knit Products.—Garrou Knitting Mills Co. (lately chartered) organized to consolidate Valdese and Morganton mills, controlled by Jno. L. Garrou, Morganton, N. C., and associates; Jno. L. Garrou, Prest.; E. P. Tate, V.-P.; E. D. Alexander, Secy.-Treas.

S. C., Columbia.—Hosiery.—Jno. M. Graham, Carolina Hall, will add new knitting machines.

Tenn., Chattanooga.—Hosiery.—Davis Hosiery Co. organized with J. C. Davis, Prest.; O. M. Davis, V.-P.; L. C. Davis, Secy.-Treas.; leased building and will equip with 50 automatic knitting machines; manufacture women's hosiery; dye, bleach and finish product; equipment purchased. (Lately noted inceptd. with \$25,000 capital.)

### WATER-WORKS

Fla., Brooksville.—City let contract to construct water-works; cost \$26,400. Address The Mayor.

Fla., St. Augustine.—Florida East Coast Rwy.'s paint shop; loss \$300,000; E. Ben Carter, Chief Engr., St. Augustine.

Ga., Atlanta.—City votes March 25 on \$500,000 bonds to improve water-works. H. N. Hurt, Ch. of Constr.

Ga., Sandersville.—City will rebuild water and electric-light plant reported damaged by fire at loss of \$10,000. Address The Mayor.

Ga., Savannah.—City will install electrically-driven water pump for Gwinnett St. water station; cost \$5900; purchased equipment. Wallace J. Pierpont, Mayor.

Ky., Winchester.—City is having plans prepared by Edgar B. Kay, Engr., Tusculoosa, Ala., for water-works.

Okla., Blackwell.—City votes March 5 on \$77,500 bonds to extend water-works. Address The Mayor.

Okla., Quapaw.—Town votes March 14 on \$57,000 bonds to construct water-works. A. G. Sweezy, Town Clerk.

Okla., Pauls Valley.—City voted \$25,000 bonds for water-works and sewer system. Address The Mayor. (Noted in Jan.)

Okla., Prague.—City, Ray Parks, Mayor, will vote on \$45,000 bonds for water and electric plants.

Tex., San Benito.—Commonwealth Water & Light Co. organized with John T. Lomax, Prest.; C. D. Cowgill, V.-P.; G. H. Winsor, Secy.-Treas.; W. D. Carpenter, Gen. Mgr.; improving water and electric-light plants. (Lately noted inceptd. with \$50,000 capital.)

### WOODWORKING PLANTS

Ala., Montgomery.—Staves.—Montgomery Stave & Cooperage Co., Geo. W. Kinnard, Gen. Mgr., has plans for stave mill.

Fla., St. John's Park.—Barrels.—A. B. Torrey Barrel Co., capital \$6000, inceptd.; A. B. Torrey, Prest.; E. F. Warner, V.-P.; W. A. Wranner, Secy.; Geo. H. Spink, Treas.

Miss., Leland.—Staves.—Miller Stave Co., capital \$30,000, inceptd. by R. J. Whiggs, F. G. Woods, C. E. Robbs and others.

N. C., Wilson.—Cooperage.—Export Tobacco Co. will erect \$30,000 cooperage and storage plant; let contract Bass Bros., Richmond.

### FIRE DAMAGE

Ala., Attalla.—J. M. S. Griffith's residence; loss about \$300.

Ala., Bessemer.—C. L. Odell's residence; loss \$300.

Ala., Troy.—Mrs. Lane's residence on South Three Notch St.; Mrs. Fannie Hanchey's residence on Madison St.

Ark., Newport.—Littleton Bros.' cotton gin; loss on building and machinery \$900.

Ark., Otwell.—G. H. Hayden's barn.

Ark., Prescott.—O. H. Helbig's residence, loss \$5000; residence owned by Horace E. Bemis Estate, loss \$15,000.

Ark., Stephens.—M. L. Edwards' residence; P. C. Grayson's dwelling.

Fla., Christina.—Phosphate Mining Co.'s electric power plant; P. H. Fuller, Gen. Mgr., Nichols, Fla.

Fla., Palmetto.—Springstead & Son's packing plant.

Fla., St. Augustine.—Florida East Coast Rwy.'s paint shop, including 4 coaches; loss \$85,000; E. Ben Carter, Ch. Engr., St. Augustine.

Ga., Atlanta.—Boulevard Grammar School at Irwin St. and Boulevard; loss \$35,000; Asa G. Candler, Mayor.

Ga., Hawkinsville.—T. J. Miller's barn and crib; loss \$3000.

Ga., Sandersville.—City's water and light plant damaged; loss \$10,000. Address The Mayor.

Ga., Statesboro.—J. E. Donehoo's dwelling, barn and outhouses; loss \$8000.

Ga., Thomasville.—Coolidge Warehouse Co.'s warehouse.

Ky., Hickman.—Alex. Barnes' residence; J. J. Jones' residence; loss \$7000.

La., Happy Jack.—Louisiana Orange Farm's barn and stable owned by Mrs. Lange, New Orleans; loss \$5000.

La., Mer Rouge.—J. U. Yedell's meat market; Shaw & Sisson's building; J. B. Hornbeak's building; loss \$12,500.

La., Mandeville.—J. B. Comstock's residence; loss \$2200.

La., Vinton.—Building occupied by Rexall Drug Store and Cumberland Telephone Exchange.

Md., Baltimore.—Home of the Friendless, Lafayette and Druid Hill Aves., loss \$2000; Miss Mary Kilroy, Supt.



Miss., Kossuth.—Agricultural High School's domestic science hall and industrial workshop; loss \$3000.

Miss., Lake Cormorant.—Mrs. B. S. Shoemaker's building, occupied by L. E. Johnson; Dr. S. M. Pollard's store building; R. E. Buford's store; loss \$30,000.

Mo., Independence.—First Christian Church, Rev. Jas. E. Wolfe, Pastor; loss \$75,000.

Mo., Kansas City.—Tractor Show Building; loss \$17,000.

Mo., Kansas City.—Brady Building; Federalman Drug Co.'s building; total loss \$125,000.

Mo., Moberly.—West Park Methodist Church; loss \$14,000. Address The Pastor.

N. C., Greenville.—Bellamah & Bro.'s store owned by C. T. Munford.

N. C., Greensboro.—Whitsett Institute, Dr. W. T. Whitsett, Pres.; loss \$15,000 to \$20,000.

N. C., Warrenton.—Postoffice building. Address The Postmaster.

N. C., Wilson.—Josephus Parker's sawmill and ginhouse; loss, including cotton, cottonseed and lumber, \$8000.

Okla., Chickasha.—Grover Holcomb's residence, 406 Oklahoma Ave.

Okla., El Reno.—Cotton gin owned by Guthrie Cotton & Oil Co. of Guthrie, Okla.; loss \$10,000.

Okla., Jet.—Public School; loss \$17,000. Address School Trustees.

S. C., Chester.—Mrs. I. P. Hardin's store; Mrs. Ethel Hutcheson's residence, both buildings owned by R. T. Cloud.

S. C., Greenwood.—Leslie High School. Address The Mayor.

S. C., Wateree.—Geo. Arledge's residence.

Tenn., Adams.—E. D. Wood's residence on Bellwood Farm; loss \$4000.

Tenn., Chattanooga.—V. M. Moore's 4 dwellings.

Tenn., Memphis.—L. H. Taylor's residence on Kirkland Ave.; loss \$3000.

Tenn., Nashville.—Isaac Newlin, Sr.'s residence at Jordonia; loss \$3500.

Tenn., Waverly.—C. D. Moore's residence at Hustburg, Big Bottom.

Tex., Big Springs.—Bob Austin's residence at 701 Jack St.; loss about \$9000.

Tex., Bonham.—Texas & Pacific R. R.'s depot; E. V. Mitchell, Chief Engr., Dallas.

Tex., Coleman.—S. P. Sumner's residence on S. Concho St.; loss \$3500.

Tex., Denton.—Mrs. M. S. Stout's building; loss \$12,000.

Tex., Gladewater.—N. C. Goolshy's store; B. F. Phillips' building; R. J. Johnson's cafe; loss \$10,000.

Tex., Lockhart.—Two school buildings. Address The Mayor.

Tex., Lometa.—F. C. Whittmire's electric light and power plant, loss \$5000; Texas Oil Co.'s warehouse.

Tex., Rosebud.—Jail building. Address The Mayor.

Tex., San Antonio.—Passenger station of Southern Pacific Lines, C. Githero, Supvr. B. & B.

Tex., Venus.—Mr. Deaton's residence; loss \$3000.

Va., Suffolk.—Richard March's residence near Holy Neck.

Va., Zuni.—A. A. Clayton's residence near Zuni.

Va., South Boston.—Warren Loftis' barn and stables.

W. Va., Switchback.—Pocahontas Fuel Co.'s commissary; loss \$25,000.

#### WRECKED BY EXPLOSION

Mo., Kansas City.—Nick Marra's building at 121 E. 3d St.; loss \$3500.

## BUILDING NEWS

### BUILDINGS PROPOSED

#### APARTMENT-HOUSES

Ala., Florence.—B. A. and T. M. Rogers will erect duplex apartment-house to cost \$9000 and three residences to cost \$1500.

Fla., Miami.—Carmichael-McCalley Co., P. O. Box 550, has plans by August Geiger, Miami, for apartment-house at Avenue B and 6th St.; 100x100 ft.; concrete and hollow tile; built-up roof; wood floors; cost \$60,000; construction by owner. (Lately noted.)

Fla., Miami.—South Florida Citrus Land Co. is reported to have plans by Gordon E. Mayer, Miami, for Ritz-Miami Terraces apartments; 62 suites; main section 4 stories; extension leading to water-front with belvedere deck extending out across roadway to dock; fireproof construction; main tower structural concrete; sidings hollow tile with stucco finish; 2 terraces; elevators; garage facilities for at least 50 cars; servants' quarters; cost \$150,000; completion by Dec. 1.

Ga., Atlanta.—J. C. Jeter will erect apartment-house; cost about \$3000.

Ga., Atlanta.—J. S. and C. R. Collins have plans by A. Barill, Atlanta, for 2 apartment-houses; 3 stories and basement; brick; stone foundation; tar and gravel roof; everhanging tile; steam heat; tiled bathrooms; each building to contain 12 suites. (Lately noted.)

Ga., Atlanta.—Mrs. Nora G. Webb has plans by Lella Ross Wilburn, Peters Bldg., Atlanta, for apartment-house; 14 suites; frame and brick veneer; asphalt shingle roof; hardwood, tile and cement floors; steam heat; electric lights; cost \$25,000. (Lately noted.)

Ga., Atlanta.—Massell Realty Co. will erect apartment-house on Ponce de Leon Ave., near Highland; twelve 3-room suites; cost \$30,000.

Mo., St. Louis.—H. Deutman will erect 2-story tenement-house at 498 Reber St.; cost \$6500.

N. C., Charlotte.—W. F. Dowd will remodel third floor of building at 217 S. Tryon St. for apartment.

Okla., Miami.—Duffy & Grimes will erect apartment-house.

Tex., Dallas.—W. D. Jones and W. Campbell will erect brick-veneer apartment-house; cost \$9740.

Tex., San Antonio.—Mrs. H. H. Kemper will erect 12-room apartment-house; cost \$7500.

Tex., San Antonio.—Mrs. G. de Cottingham will erect 6-room apartment-house; cost \$7500.

Tex., San Antonio.—Carlos Guerguin will erect apartment-house; cost \$6500.

Va., Portsmouth.—Suburban Investment Co. will erect additional story to residence at 621 County St., and convert into 3-family apartment-house; cost \$2500.

Va., Richmond.—L. H. Blair and others will expend \$4500 to repair brick apartments at 9-11 S. Third St.

Va., Portsmouth.—Parker & Mulvey will erect apartment-house at Sixth and Naval Pl.; 18 to 24 suites.

#### ASSOCIATION AND FRATERNAL

Ala., Mobile.—Loyal Order of Moose acquired 50-acre site and will establish home for aged.

Fla., Moore Haven.—A. F. & A. M. will erect building; 2 stories; lower floor for 2 stores.

Ga., Atlanta.—Barnes Lodge No. 55, I. O. O. F., plans to erect building at Camp Gordon; about 40x60 ft.; temporary wood construction; cost \$5000; J. E. Bodenhamer, Grand Master, Decatur, Ga.

Md., Meade.—P. O. Baltimore.—American Red Cross Assn., Washington, D. C., will erect convalescent-house at Camp Meade; 100x100 ft.

Mo., St. Louis.—Railroad Y. M. C. A. will erect \$25,000 permanent hut at 20th and Eugenia Sts.

Okla., Jenks.—I. O. O. F. plans to erect 2-story brick lodge building; 40x80 ft.; W. Geogern, Chrmn. Building Comm.

S. C., Charleston.—Housing Commission, War Work Council, Y. W. C. A., is having plans prepared by Duncan Candler, 105 W. 40th St., New York, for girls' dormitory at navy-yard; 3 stories; accommodations for 51; 2 fire walls; fire escapes; each room 8x12 ft.; shower baths.

Tex., Fort Bliss.—Y. M. C. A. will erect building at Fort Bliss; type "E"; auditorium 90x50 ft., to seat 1500 to 2000 men; reading-room 40x50 ft.; cost \$7000.

Va., Newport News.—American Red Cross Association, Washington, D. C., will erect convalescent home. (See Government and State.)

Va., Newport News.—Y. M. C. A. will erect building at Camp Hill; "E" type.

Va., Richmond.—I. O. O. F. will erect building at Grace and Fausse Sts.; brick and stone; cost \$15,000.

#### BANK AND OFFICE

Ala., Florence.—First National Bank is reported to erect 5-story bank and office building to cost \$100,000.

D. C., Washington.—Southern Building Supply Co., Inc., H. R. Eastwood, Pres., 3200 K St. N. W., will erect office building, etc. (See Warehouses.)

Ga., La Grange.—Bank of La Grange, R. L. Renter, Pres., will remodel building lately noted; first floor for lobby and general office room; second story for safety deposit boxes, savings department and clerical rooms; iron or steel stairways; install new 2-story vault, new furniture and fixtures; structure 24x100 ft.; brick and marble; metal roof; tile floors; steam or hot-air heat; electric and gas lights; bank to furnish materials and work done by day labor; bids for marble work received until March 15. (See Machinery Wanted—Heating Equipment; Electrical Equipment.)

Ky., Hazard.—S. Davis Hughes will erect \$30,000 office and business building; bids closed in 2 weeks; 40x200 ft.; 5 stories and basement; probably brick; construction begins in spring. Address Hurst & Hughes.

Ky., Weeksbury.—Beaver Valley State Bank organized by W. L. Stumbo, C. W. Rhodes and others; will erect bank building; brick and concrete; W. J. Bray, Archt., Weeksbury. (See Machinery Wanted—Vault Door; Safe.)

La., New Orleans.—Liberty Bank & Trust Co., Jas. H. Tharp, Pres., plans later to erect bank building. (See Machinery Wanted—Bank Fixtures; Safe; Vault.)

Okla., Marietta.—Carey-Lombard-Young Lumber Co. will erect brick office building.

Okla., Marietta.—Community League will erect brick office and assembly hall; cost \$6000.

Va., Norton.—Charlie Harmon will erect \$25,000 office and business building; will let contract at once.

Va., Richmond.—West End Bank will erect building on Main St.; 1 story; brick; cost \$10,000.

#### CHURCHES

Ala., Anniston.—Oxanna Methodist Church will erect parsonage; Rev. W. T. Hamby, pastor, Glen Addie.

Ga., Atlanta.—Druid Hills Baptist Church, Dr. F. M. McConnell, Pastor, will erect building; construction begins by April.

Ky., Indian Bottom.—Middle West Coal Co. will build church at Caudill's Branch. (See Schools.)

La., Ponce de La.—State Mission Board of the Baptist Church will erect church building; Rev. Holman R. Turner, Pastor, Hammond, La.

Ky., Bellier.—Edgewater Coal Co. will let contracts by March 1 to erect church and school buildings.

Ky., Seco.—South East Coal Co. will erect church building; will receive bids.

La., Alexandria.—Emmanuel Baptist Church will erect church and Sunday-school building; cost, including site, \$100,000. Address The Pastor.

Mo., Independence.—First Christian Church, Rev. Jas. E. Wolfe, Pastor, will rebuild structure noted damaged by fire at loss of \$75,000.

Mo., Moberly.—West Park Methodist Church will rebuild structure noted damaged by fire at loss of \$14,000. Address The Pastor.

Okla., Purcell.—J. H. Dyer will receive bids to erect brick church building; plans and specifications at Chickasaw National Bank.

Okla., Tulsa.—A. M. E. Church will erect building at 503 N. Frankfort St.; cost \$8000. Address The Pastor.

S. C., North.—Baptist Church, Rev. J. J. Beach, Pastor, will erect church and Sunday-school building; brick; metal or tile roof; wood floors; hot-air heat; electric lights; cost \$15,000; bids opened in 2 or 3 weeks; Edwards & Sayward, Archts., Atlanta. Address The Pastor. (Lately noted.)

Tex., Palestine.—Congregational Church has plans by A. O. Watson, Austin, Tex., for building; 70x78 ft.; Dennison interlocking tile with stucco exterior; roof garden; cost \$15,000. Address Paul C. Burhaus, Palestine. (Lately noted.)

Va., Bristol.—Mary Street Methodist Church, Rev. H. B. Vaught, Pastor, has plans for proposed church building.

#### CITY AND COUNTY

Ala., Mobile.—Warehouses and Sheds.—City plans to build warehouses and freight sheds in connection with construction of \$600,000 dock and terminal improvements; Wright Smith, City Engr.

Ark., Fort Smith.—Fire Station.—City has plans for proposed fire station. Address The Mayor.

Ark., Murfreesboro.—Jail.—Pike County rejected all bids to erect jail; brick and reinforced concrete; tin roof; reinforced concrete and ordinary floor construction; Witt, Seibert & Co., Archts., Texarkana, Ark. (Previously noted.)

Ga., Atlanta.—Cyclorama and Museum.—City votes March 25 on \$100,000 bonds to build cyclorama and museum; Asa G. Candler, Mayor.

Ga., Rome.—Jail.—Floyd County Commrs. are considering erecting jail.

Md., Baltimore.—Library.—City is having plans prepared by Ellicott & Emmart, Union Trust Bldg., Baltimore, for Branch No. 19, Enoch Pratt Free Library in East Baltimore; 1 story; ornamental brick.

N. C., Greensboro.—Fire House.—City will erect building for west side fire truck. Address The Mayor.

Okla., Enid.—City Hall.—City is considering election on bonds to erect city hall. Address The Mayor.

Okla., Muskogee.—Fair.—City voted \$100,000 bonds to improve State fair grounds. Address The Mayor. (Lately noted.)

Tex., Dallas.—Home.—City votes in April on \$25,000 bonds to erect home for newsboys. Address The Mayor.

Va., Pulaski.—Hose House.—City will erect hose house to replace present structure. Address The Mayor.

W. Va., Montgomery.—Town Hall.—Town votes Feb. 27 on \$30,000 bonds to erect town building. Address Town Clerk.

#### DWELLINGS

Ala., Bessemer.—C. L. Odell has plans by H. D. Breeding, Birmingham, for residence to replace structure noted damaged by fire; 6 rooms; frame; composition roof; Southern pine floors; fireplaces and heaters; city lighting; cost \$3000.

Ala., Florence.—Chas. L. Haley, Jr., will erect \$4000 residence.

Ala., Florence.—R. L. Malone will erect 3 dwellings on Kendrick St. and one on Howell St.

Ala., Florence.—B. A. and T. M. Rogers will erect 3 residences to cost \$1500. (See Apartment-houses.)

Ala., Florence.—J. Y. Young will build \$2000 residence.

Ala., Florence.—W. H. Conner will erect residence.

Ala., Florence.—Jas. S. Kilburn will erect five 5-room residences.

Ala., Florence.—John L. Hughston will erect \$5500 residence.

Ark., Little Rock.—Berry Jones will erect residence.

Ark., Little Rock.—E. W. Jenkins will remodel residence at 215 W. 15th St.

Ark., Little Rock.—J. W. Mitchell will remodel residence at 1623 Booker St.

D. C., Washington.—H. R. Howenstein, 1314 F St. N. W., will erect 3 brick dwellings at 1305-09 Morse St. N. E.; cost \$8000.

D. C., Washington.—Mrs. L. F. Day will erect dwelling at 2911 Massachusetts Ave.; cost \$3500.

D. C., Washington.—Chas. E. Wire, Inc., 1413 H St. N. W., will erect 5 brick dwellings at 1408-16 Crittenden St.; cost \$25,000.

D. C., Washington.—J. S. Gruver, Union Trust Bldg., will erect 6 brick dwellings at 701-11 Longfellow St.; cost \$13,500.

Fla., Oldsmar.—Jacob Bornstein will erect residence.

Fla., Oldsmar.—Fred. L. Cook, Pres. of Oldsmar Farms Co., will erect 20 dwellings for employees.

Fla., Tampa.—L. H. McIntire will erect 10 cottages.

Ga., Atlanta.—J. H. Whisenant has plans by Lella Ross Wilburn, Peters Bldg., Atlanta, for \$8000 residence; 2 stories; brick veneer; steam heat; asphalt shingle or tile roof; tile and hardwood floors; 2 baths; electric lights. (Lately noted.)

Ga., Atlanta.—J. F. Evans will erect \$8000 brick residence at 21 St. Charles Place.

Ga., Atlanta.—Mrs. Emily T. Morgan will erect residence at 23 Boulevard Terrace; 1 story; brick; cost about \$4000.

Ga., Atlanta.—W. S. Walker will erect residence at 8 Kennesaw Ave.; 1 story; brick; cost about \$4000.

Ga., Atlanta.—W. A. Lee will erect 2 brick residences on Adair Ave., Adair Park.

Ga., Decatur.—L. L. Roberts and Mrs. P. M. Roberts will erect \$3000 residence.

Ga., Decatur.—Hamilton-Wood Co., 207 Candler Bldg., Atlanta, has plans by Lella Ross Wilburn, Peters Bldg., Atlanta, for 5 bungalows; 6, 7 and 8 rooms; brick veneer; asphalt-shingle roofs; hardwood floors; construction, by owner, begun. (Lately noted.)

Ga., Decatur.—Poleman L. Weekes will erect residence; 2 stories; brick veneer; 9 rooms; stone trim; slate roof; cement, tile and hardwood floors; roll asphalt roofing for porches; furnace heat; electric lights; cost \$8500; Lella Ross Wilburn, Archt., Peters Bldg., Atlanta. (Lately noted.)

Ga., Decatur.—Mrs. I. G. Wilson has plans by Lella Ross Wilburn, Peters Bldg., Atlanta, for residence; 1 story; 6 rooms; brick foundation; furnace heat; hardwood floors; asphalt shingle roof; electric lights; cost \$2800.

Ga., Tifton.—Tifton Home Co. is having plans prepared by A. Barill, Grant Bldg., Atlanta, for 10 residences; bungalow type; 1 brick veneer, others frame; composition roofs; cost \$2000 and \$3000 each. (Lately noted.)

Ky., Elkhorn.—East Elkhorn Coal Co. will let contract within 2 weeks to erect 25 miners' houses at Elkhorn City.

Ky., Elkhorn.—Kentucky-Elkhorn Coal Co., Prarie, Ky., will let contract within 15 days to erect 30 miners' houses.

Ky., Garrett.—Standard-Elkhorn Coal Co. will close contracts at once to erect 25 additional miners' dwellings and school building.

Ky., Hazard.—Carr's Fork Coal Co. will build 200 miners' houses; contract let in 10 days.

Ky., Shelby Gap.—Huntington By-Product Coal Co. will let contract within 15 days to erect 20 miners' cottages at Elkhorn Creek.

Ky., Sutton.—Funk Coal Co. will let contract by March 1 to erect 20 miners' houses.

Md., Baltimore.—J. Henry Smith, 1426 Light St., will erect two 2-story dwellings on Brooks Lane; cost \$4000.

Md., Baltimore.—Hiram W. Friedenwald is having plans prepared by Chas. M. Anderson, 324 N. Charles St., Baltimore, for 2-story frame cottage on Bear Creek.

Miss., Corinth.—H. N. Young contemplates erecting residence.

Mo., Kansas City.—E. H. Kombrick will erect 2-story stucco-veneer dwelling; cost \$3500.

Mo., Kansas City.—J. R. Couch will erect four 1-story frame dwellings; cost \$4000.

N. C., Elkin.—A. Chatham, Sr., has plans by C. Gilbert Humphreys, Winston-Salem, N. C., for residence to replace structure lately noted damaged by fire at loss of \$5000; 8 rooms.

N. C., Gastonia.—Myrtle Mills let contract to H. B. Pattillo, Gastonia, to build 40 cottages for cotton-mill operatives; Robinson Co., Archt.-Engr., Atlanta, Ga.

N. C., Laurel Hill.—Edwin Morgan will erect bungalow; 1 story; frame; 7 rooms; stone foundation; hardwood floors; fireplace; shingle roof; electric lights; cost \$4000; Lella Ross Wilburn, Archt., Peters Bldg., Atlanta.

N. C., Sanford.—Fred. P. Strong will erect brick residence.

Okla., Jenks.—C. H. Cohea will erect 4 dwellings.

Okla., Oklahoma City.—Jack Ferguson will erect 1-story frame residence; cost \$2000.

Okla., Oklahoma City.—A. R. Nelson will erect 2-story frame residence; cost \$4000.

Okla., Oklahoma City.—R. S. Holmes will erect 1-story frame residence; cost \$2250.

Okla., Oklahoma City.—O. B. West will erect two 1-story frame dwellings; cost \$2000 each.

Okla., Oklahoma City.—Aurelius Swanson Co. will erect 2-story dwelling at 309 Classen St.; cost \$8000.

Okla., Oklahoma City.—L. C. Stone will erect 1-story frame residence; cost \$2000.

Okla., Oklahoma City.—W. F. Campbell will erect 2-story brick-veneer residence at 409 W. 16th St.; cost \$10,000.

Okla., Tulsa.—Chas. A. Mitchell will erect \$4000 residence.

Okla., Tulsa.—G. B. Stotts will erect residence; 2 stories; brick; cost \$25,000.

Okla., Tulsa.—L. L. Bathe will erect \$3000 residence.

Okla., Tulsa.—J. R. Cole will erect residence; 2 stories; brick; cost \$25,000.

Okla., Tulsa.—Bruce & Co. will erect \$5000 residence.

Okla., Tulsa.—C. H. Nicholson will erect \$3000 residence.

Okla., Tulsa.—Bush-Burns Realty Co. will erect residence at 1708 Norfolk St.; cost \$5000.

Okla., Tulsa.—H. A. Rose will erect \$3000 residence.

Okla., Tulsa.—J. K. Carr will erect residence; cost \$3000.

Okla., Tulsa.—L. B. Felt will erect \$4500 residence.

Okla., Tulsa.—R. H. Sigfried will erect \$3000 residence.

Okla., Tulsa.—Mary Ida Wygant will build \$6000 residence.

Okla., Tulsa.—Morris Pyle will erect \$5000 residence.

Okla., Tulsa.—R. M. McFarlin will erect servants' house and garage at 1610-14 S. Carson St.; cost \$8000.

Okla., Tulsa.—Wm. B. Mohr will erect \$3000 residence.

Tex., Beaumont.—Ed. E. Eastham will erect residence; 2 stories; hollow tile; cost \$14,000.

Tex., Beaumont.—G. B. Watkins will erect residence.

Tex., Beaumont.—C. B. Strickland will erect residence.

Tex., Beaumont.—Mrs. L. A. Kirby will erect residence.

Tex., Dallas.—L. O. Kidd will erect 7-room frame residence; cost \$4484.

Tex., Dallas.—L. W. Bateman will erect 2-story frame residence and garage; cost \$3250.

Tex., Dallas.—Power Investment Co. will erect 5 dwellings; 5 rooms; cost \$1550 each.

Tex., Dallas.—Commercial Investment Co. will erect 2 frame residences; cost \$2800.

Tex., Dallas.—Home Financing Co. will erect frame residence in Oaklawn; cost \$2000.

Tex., Galveston.—Dr. O. C. Pabst will erect \$4000 residence.

Tex., Houston.—E. M. Thomas will erect residence; 8 rooms; brick veneer and frame; cost \$5000.

Tex., San Antonio.—A. M. Puckett will erect 5-room residence; cost \$3000.

Tex., San Antonio.—H. D. Rheimer & Bros. will erect 5-room residence; cost \$2500.

Tex., San Antonio.—Robert Yturri will erect 7-room residence; cost \$3000.

Tex., San Antonio.—Ed. Finche will erect 5-room dwelling; cost \$2000.

Tex., San Antonio.—Hugo Eichenreth will erect 5-room residence; cost \$2200.

Tex., San Antonio.—J. Tarrillon will erect 5-room residence; cost \$3000.

Tex., San Antonio.—Mrs. Mary Izard will erect 5-room residence; cost \$2200.

Tex., San Antonio.—Eugene Roth will erect 4-room residence; cost \$2200.

Tex., San Antonio.—T. H. Schaffer will erect 4-room residence; cost \$2200.

Tex., San Antonio.—J. N. Foard will erect residence; 5 rooms; cost \$2300.

Tex., San Antonio.—E. Williford will erect residence; 6 rooms; cost \$3000.

Tex., Wichita Falls.—C. D. Shamburger will erect 4 residences.

Tex., Weatherford.—Preston Martin will erect bungalow.

Va., Danville.—Mrs. E. G. Catlin has plans by Heard & Cardwell, Danville, for residence; brick and hollow tile; slate roof; oak and pine floors; date opening bids not set; other details not determined.

Va., Newport News.—Newport Development Co. Incptd. with E. J. Graff, Prest.; A. Rosenbaum, Secy.-Treas.; will erect dwellings.

Va., Newport News.—Graff Bros. & Co., 219 Twenty-fifth St., will erect 30 residences; 2 stories; frame; site 25x100 ft. each; cost \$50,000. (See Machinery Wanted—Brick; Lumber.)

Va., Richmond.—Laura J. Sutherland will expend \$2000 to repair brick dwelling at 1423 Hanover Ave.

#### GOVERNMENT AND STATE

Ga., Atlanta.—Lodge.—Barnes Lodge No. 55, I. O. O. F., plans to erect building at Camp Gordon; J. E. Bodenhamer, Grand Master, Decatur, Ga. (See Association and Fraternal.)

Md., Meade.—P. O. Baltimore—Red Cross—American Red Cross Assn., Washington, D.

C., will erect convalescent building at Camp Meade.

Mo., Kansas City.—Soldiers' and Sailors' Home.—War Camp Community Service, J. P. Robertson, Representative, plans to build soldiers' and sailors' home.

Mo., St. Louis.—Association.—Railroad Y. M. C. A. will erect permanent hut adjoining present structure at 20th and Eugenia Sts.; cost \$25,000.

N. C., Charlotte.—Theater.—War Department, Washington, D. C., will erect Liberty Theater at Camp Greene. (See Theaters.)

Okla., Fort Sill.—Theaters.—War Department, Washington, D. C., will erect Liberty Theater at Camp Doniphan.

S. C., Charleston.—Girls' Dormitory.—Housing Committee, War Work Council Y. W. C. A. is having plans prepared by Duncan Candler, 105 W. 40th St., New York, for girls' dormitory at Charleston Navy-yard. (See Association and Fraternal.)

S. C., Spartanburg.—Auditorium.—War Department, Washington, D. C., will erect auditorium at Camp Wadsworth; Raymond Fosdick, Chmn. Commission on Training Camp Activities.

Tex., Fort Bliss.—Association.—Y. M. C. A. will erect building at Fort Bliss; type "E"; cost \$7000. (See Association and Fraternal.)

Tex., Waco.—Theater.—War Department, Washington, D. C., will erect Liberty Theater at Camp MacArthur. (See Theaters.)

Va., Hampton Roads.—Hospital School.—Bureau of Yards and Docks, Navy Department, Washington, D. C., receives bids until March 4 to construct hospital corps training school; cost \$75,000.

Va., Newport News.—Association.—Y. M. C. A. will erect "E" type building at Camp Hill.

Va., Newport News.—Warehouse.—War Department, Washington, D. C., will build warehouse at Pier No. 2; 1 story; 80x60 ft.

Va., Newport News.—Convalescent Home.—American Red Cross Association, Washington, D. C., will erect convalescent home for soldiers.

Va., Norfolk.—Toilet-room.—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C., opens bids Mch. 19 for toilet-room for women in United States custom-house; drawings and specifications from custodian, Norfolk, and Mr. Wetmore, Washington.

#### HOSPITALS, SANITARIUMS, ETC.

La., La Fayette.—Dr. F. R. Tolson will erect general hospital to replace structure lately noted damaged by fire at loss of \$5000; 48x100 ft.; brick; terra cotta tile roof; tile floors; date opening bids not set.

N. C., Dix Hill.—State has plans by Harry Barton, Greensboro, N. C., for kitchen, butcher shop, bakery, etc., at State Hospital for the Insane; 70x114 ft.; fireproof; composition roof; reinforced concrete floors; steam heat; bids opened March 14; construction begins in spring. Address Dr. Albert Anderson, Supt. (Lately noted.)

N. C., Monroe.—City has plans by Marvin W. Helms, Charlotte, for hospital building on S. Hayne St.; 30x30 ft.; slate roof; wood floors; steam heat; electric lights; cost \$10,000; contract let in about 30 days. Address D. B. Snyder, Secy., Monroe. (Lately noted.)

N. C., Sanatorium.—North Carolina Sanatorium for the Treatment of Tuberculosis, Dr. A. L. McBrayer, Supt., has plans by W. G. Rogers, Charlotte, N. C., for dairy, milking barn with stalls; 50x150 ft., 45x100 ft. and 32x40 ft.; concrete and wood; slate roof; concrete floors; cost \$20,000; elevator, \$200; bids opened March 15; contract let April 1; construction begins April 10. Address Dr. McBrayer.

Okla., Norman.—State will probably erect State hospital for criminal insane; R. L. Williams, Governor, Oklahoma City.

Tenn., Memphis.—City and Shelby County will erect anti-tuberculosis hospital; H. H. Litty, Mayor.

Tex., Wichita Falls.—State selected C. H. Page & Bro., Austin, as architects for North-west Texas Insane Asylum; \$375,000 available. (Lately noted.)

Tex., Yoakum.—City votes April 2 on \$50,000 hospital bonds. Address V. E. Lynch. (Lately noted.)

Va., Hampton Roads.—Bureau of Yards and Docks, Navy Department, Washington, D. C., receives bids until March 4 to construct hospital corps training school; cost \$75,000.

#### HOTELS

Ala., Florence.—W. L. Reeder has plans by Warren & Knight, Bliss Bldg., Florence, and Birmingham, for hotel and store building on East Tennessee St.; 3 stories; 80x125 ft.; 96 rooms on second floor; private baths or running water for all rooms; steam heat; electric lights; beamed ceiling and brick mantle fireplace in guest parlor; hollow tile, brick, iron columns, steel beams, etc.; red tapestry brick exterior with stone trimmings; 3 fire escapes; shower baths, lavatories, etc., on all floors; also remodel building at Wood Ave. and Tennessee St. for store and hotel building with 75 rooms on second floor, also install shower baths, etc.

Ark., Walnut Ridge.—Lane Hotel, Mr. Glenn, Prop., will expend about \$5000 to improve building; install water and heating systems, additional baths, construct portico, enlarge dining-room and parlor, etc.

Ga., Savannah.—Tybee Hotel & Amusement Co. Incptd. with \$150,000 capital by R. W. Powers and Edw. S. Elliott; will improve and repaint Tybee Hotel and cottages; install 3-ft. transoms over all doors; improve bathhouses, construct new boardwalks, etc.; cost \$50,000.

Md., Baltimore.—Chas. Greeble, Hotel Lexington, acquired Hoen Bldg. at Holliday and Lexington Sts.; will remodel and erect 2 additional stories for hotel.

Mo., Joplin.—J. W. Howell, Mgr. Connor Hotel, will erect 3-story annex to hotel; 60 sleeping-rooms; 60x130 ft.; cost \$40,000; A. C. Michaelis, Archt., Joplin.

S. C., North Augusta.—Aiken County Hotel Co., H. H. Bell, Prest., acquires Pine Heights Sanatorium and plans to erect 50 additional rooms during summer. (Lately noted incorporated.)

Tex., Cisco.—Moberly Hotel will erect addition to hotel; about 25 rooms.

Va., Williamsburg.—Chas. B. Cooke and others, Richmond, are reported to remodel Robt. A. Bright residence for hotel.

W. Va., Charleston.—Holley Hotel Co., Inc., has plans by C. C. and E. A. Weber, Cincinnati, for addition to hotel; 150 rooms; fireproof construction, roof and floor; Webster steam-heating system; city electric lights; cost \$175,000; twin elevators, about \$15,000; bids opened about March 1. Address P. Ashton.

#### MISCELLANEOUS

D. C., Washington.—Restaurant.—Childs Company, 1423 Pennsylvania Ave. N. W., will erect 2 additional stories to building; cost \$30,000.

Fla., West Palm Beach.—Clubhouse.—South Palm Beach Community Club, Alfred H. Wagg, Secy., will erect clubhouse; O. J. Williams, Archt., West Palm Beach.

Ga., Valdosta.—Fair.—Georgia-Florida Fair Association will erect 7 buildings, to include agricultural hall with 22,000 sq. ft. display space; plans include midway and racetrack; increased capital \$35,000.

Ky., Indian Bottom.—Welfare.—Middle West Coal Co. will build welfare building at Caudill's Branch. (See Schools.)

Md., Baltimore.—Home.—Home of the Friendless, Miss Mary Kilroy, Supt., Lafayette and Druid Hill Aves., will probably repair building noted damaged by fire.

Okla., Marietta.—Assembly Hall.—Community League will erect assembly hall and office building; brick; cost \$6000.

Tenn., Chattanooga.—Home.—Florence Crittenton League of Mercy plans to erect home; Dr. T. S. McCallie is interested.

#### RAILWAY STATIONS, SHEDS, ETC.

Fla., Lakeland.—Atlantic Coast Line R. R., J. E. Willoughby, Chief Engr., Wilmington, N. C., will repair roof of passenger station lately damaged by fire and build additional story; second floor 34x148 ft.; brick walls; slate roof; wood partitions; plastering; first floor promenade tile, second wood; 2-pipe direct steam heat; date opening bids and beginning construction not decided; plans by G. M. Policy, Archt., Wilmington.

Ky., Louisville.—Louisville & Jeffersonville Bridge Co. will expend \$5000 to repair freight-house.

Tex., San Antonio.—Southern Pacific Lines, C. Gilthorpe, Suprv. B. & B., will repair passenger station damaged by fire; will install tiling throughout entire floor space of station proper.

#### SCHOOLS

Ala., Selma.—School Board will receive bids to erect 12-room grammar school; plans and specifications from Warren & Knight, Archts., Empire Bldg., Birmingham.



Ala., Boyles.—Jefferson County Board of Education, Birmingham, is having plans prepared by D. O. Whildin, Birmingham, for school to replace burned structure; cost \$55,000. (Lately noted.)

Fla., Clearwater.—Lealman School District voted \$6500 bonds to erect school; Dixie M. Hollins, Secy. Board of Public Instruction. (Previously noted.)

Fla., Tarpon Springs.—Tarpon Springs School District voted \$6000 bonds for schools; Dixie M. Hollins, Secy. Board of Public Instruction, Clearwater. (Lately noted.)

Fla., Vero.—St. Lucie County Board of Education, Fort Pierce, Fla., ordered vote March 26 in Dist. No. 11 on \$25,000 bonds to erect school. (Lately noted.)

Ga., Atlanta.—City will probably rebuild Boulevard Grammar School at Irwin St. and the Boulevard, noted damaged by fire at loss of \$55,000; Asa G. Candler, Mayor.

Ga., Douglasville.—School Trustees will receive bids to erect 12-room and auditorium school; according to drawings by W. T. Downing and R. F. Pringle, Associate Architects; plans and specifications at office Mr. Pringle, 1426 Empire Bldg., Atlanta.

Ga., Macon.—Board of Education plans to erect school in East Macon; J. N. Neel, Chmn. of Com.

Ky., Indian Bottom.—Middle West Coal Co. will build school, church and welfare buildings at Caudill's Branch.

Ky., Garrett.—Standard-Elkhorn Coal Co. will erect 25 additional miners' dwellings and school building; contracts closed at once.

Ky., Hellier.—Edgewater Coal Co. will let contracts by March 1 to erect school and church buildings.

Ky., Millstone.—South East Coal Co., Seco, Ky., will erect school building.

La., Thibodaux.—School Dist. No. 5 of Lafourcade Parish voted tax to build high school. Address Dist. School Trustees.

Miss., Booneville.—Town votes Mch. 4 on \$25,000 bonds to erect school; W. W. Lacy, Mayor.

Miss., Grenada.—Grenada College, Dr. J. R. Countiss, Pres., will erect \$60,000 dormitory; each room equipped with bathroom and lavatory; also plans to erect library building.

Miss., Kossuth.—Agricultural High School Trustees will probably rebuild domestic science hall and industrial workshop noted damaged by fire at loss of \$3000.

Mo., Kennett.—R. H. Tinnin, Pres., and Harry Sheppard, Clerk of Board of Bone School District No. 65, Hornersville, Mo., receive bids until March 12 to erect 1-story brick school building; 79x48 ft.; wood shingle roof; p'ne floors; low-pressure heat; T. E. Hyatt, Archt., Kennett; plans and specifications from Mr. Tinnin as above. (Lately noted.)

N. C., Greensboro.—Whitsett Institute, Dr. W. T. Whitsett, Pres., will probably rebuild structure noted damaged by fire at loss of \$15,000 to \$20,000.

N. M., Los Tanos.—County Board of Education of Guadalupe County receives bids until March 18 at office Supt. of Schools, Santa Rosa, N. M., to reconstruct public school building; cost not to exceed \$2000; B. Lucero, Pres., Santa Rosa.

Okla., Chickasha.—Oklahoma College for Women, G. W. Austin, Pres., plans to erect addition to Nellie Sparks Hall and erect fine arts building; cost \$100,000.

Okla., Jet.—School Trustees will rebuild public school noted damaged by fire at loss of \$17,000.

Okla., Marietta.—City voted \$3000 school improvement bonds. Address The Mayor.

Okla., Norman.—University of Oklahoma will erect \$75,000 library building.

Okla., Stillwater.—School Board is considering vote on \$60,000 bonds to erect school.

Okla., Stillwater.—Oklahoma Agricultural & Mechanical College will erect \$100,000 science hall and \$100,000 armory and gymnasium.

S. C., Greenwood.—City will probably rebuild Leslie High School noted damaged by fire. Address The Mayor.

Tenn., Memphis.—Shelby County Board of Education receives bids until March 7 to erect school in Fifth District; plans and specifications at office Mahan & Broadwell, Architects, Memphis.

Tex., Atlanta.—School Trustees plan to erect 2-story brick and stone high school.

Tex., Crockett.—School Board lets contract within 30 days to erect high school; cost \$50,000; C. H. Page & Bro., Austin, and Jones & Tabor, Houston, Asso. Archts. (Previously noted.)

Tex., Thorp Springs.—C. R. Nichol, Pres., Thorp Springs Christian College, receives bids until March 4 to erect concrete and brick 54-room dormitory; plans and specifications from Wm. Albert Tackett, Archt., Sherman, Tex., and Mr. Nichol, Thorp Springs.

Va., Blacksburg.—Virginia Polytechnic Institute plans to issue \$400,000 bonds to erect additional buildings and make other improvements.

W. Va., Adamston.—J. C. Timberman, Secy. Board of Education of Coal District, Harrison County, W. Va., receives bids until March 11 for material and erection of main unit of high school building, exclusive of plumbing, sewerage, gasfitting, electrical work, heating and ventilating system; plans and specifications from Holmboe & Lafferty, Archts., Clarksburg, W. Va.

### STORES

Ala., Florence.—W. L. Reeder has plans by Warren & Knight, Bliss Building, Florence, and Birmingham, Ala., for store and hotel building and for remodeling building at Wood Ave. and Tennessee St. for store and hotel. (See Hotels.)

Ala., Florence.—Rogers Bros. will erect additional story to building and install store front; cost \$35,000.

Fla., Moore Haven.—A. F. & A. M. will erect store and lodge building; 2 stories. (See Association and Fraternal.)

Ky., Hazard.—S. Davis Hughes and Dr. T. L. Hurst will erect store and office building on Main St.; cost \$30,000; bids closed in 2 weeks. Address Mr. Hughes.

Md., Baltimore.—Chas. G. Morton is having plans prepared by A. Lowther Forrest, Professional Bldg., Baltimore, for remodeling building at 215-17 St. Paul St.; install front, etc.; cost \$10,000.

Mo., Kansas City.—John Gosling, Jr., will erect 1-story brick business building; cost \$3000.

S. C., Wedgefield.—K. H. Weinberg will erect store building to replace burned structure; 29x50 ft.; brick; tin roof; wood floors; cost about \$3800; gasoline lighting; date opening bids or beginning construction not decided. (Lately noted.)

Tex., Dallas.—A. T. Lloyd will expend \$5500 to remodel business building and erect brick and stone addition.

Tex., Dallas.—L. Kleinman will expend \$6000 to remodel building at 1818 Sanger Ave.

Tex., Dallas.—J. E. Pearce, Austin, Tex., will erect business building; 3 stories; cost \$40,000.

Tex., El Paso.—Perry Kirkpatrick will expend \$3000 to remodel building at Stanton and Mills Sts.

Tex., Freeport.—Tobey Hardware Co. has plans by Jones & Tabor, Houston, for store building; 25x75 ft.; brick veneer and interlocking tile; tar and gravel roof; cement floors; cost \$7500; construction by owner. (Lately noted.)

Tex., Houston.—Jos. Hillan will repair building damaged by fire; cost \$3400.

Tex., Houston.—B. A. Riesner will erect 5-story-and-basement fireproof business building to replace burned structure.

Tex., Houston.—Alkemeyer Co. is having plans prepared for 5-story fireproof business building at Prairie and Travis Sts.

Tex., Navasota.—L. P. Wilson, A. H. Ketchum Estate and R. B. Templeman will erect brick buildings to replace structures lately noted damaged by fire.

Tex., San Antonio.—J. C. Dielmann will erect brick store building; cost \$3000.

Tex., San Antonio.—Dr. F. M. Hicks will erect store building; cost \$3000.

Tex., Yoakum.—S. L. Edwards will erect store building; 100x110 ft.; brick; metal or composition roof; cement or concrete floors; cost \$15,000 to \$20,000; sidewalks, \$500.

Va., Appomattox.—J. R. Atwood & Co. will erect 2 stores and warehouse.

Va., Danville.—McCrary Stores Corp. acquired 2 buildings on S. Union St.; will convert into one building, remodel and connect with store on Main St.; cost \$4000.

Va., Norton.—Charlie Harmon will let contract at once to erect business and office building; cost \$25,000. (See Bank and Offices.)

### THEATERS

N. C., Charlotte.—War Department, Washington, D. C., will erect Liberty Theater at Camp Greene; Harry P. Harrison, Executive Chmn., Washington.

Okla., Clinton.—Lyric Theater management accepted plans to erect theater.

Okla., Fort Sill.—War Department, Washington, D. C., will erect Liberty Theater at Camp Doniphan.

Okla., Miami.—Dr. W. L. McWilliams will remodel theater building.

Tenn., Chattanooga.—Signal Amusement Co. has plans by R. H. Hunt, Chattanooga, for Liberty Vaudeville Theater.

Tex., San Antonio.—August Wellbacher will erect theater building on McNew Ave.; cost \$3000.

Tex., Waco.—War Department, Washington, D. C., will erect Liberty Theater at Camp MacArthur.

### WAREHOUSES

Ala., Mobile.—City will erect warehouses and freight sheds in connection with \$600,000 dock and terminal improvements; Wright Smith, City Engr.

D. C., Washington.—Southern Building Supply Co., Inc., H. R. Eastwood, Pres., 3200 K St. N. W., will erect warehouses, office building and garage near Lemond Station; also install additional machinery for steel department.

Ky., Louisville.—Swiss Cleaners & Dyers will erect frame warehouse; cost \$2000.

## BUILDING CONTRACTS AWARDED

### APARTMENT-HOUSES

N. C., Wilson.—A. A. Privette has plans by and let contract to H. T. Crittenden, Wilson, to erect apartment-house on Goldsboro St.; 105x120 ft.; brick and timber; slag roof; city electric lights; cost \$60,000; steam heat, \$4000; freight elevator. Address Contractor. (Lately noted.)

Va., Alexandria.—A. S. Willbourn and W. C. Drury let contract to Julian D. Knight, Alexandria, to remodel 3-story brick building at 805-07 King St. for apartment-house.

Va., Danville.—H. R. Fitzgerald acquired Francisco residence and will convert into two 6-room apartments; construct porch entire length of building, etc.; frame; slate roof; rift pine and oak floors; city gas and electric lights; cost \$5000; Cox heating system \$1000; Heard & Cardwell, Archts.; W. K. Anderson, Contr.; both of Danville.

Va., Richmond.—Max E. Ruehrmund let contract to American Construction Corporation, Richmond, to erect apartment-house; 3 stories; brick; 48x51 ft.; cost \$21,000; Carl Ruehrmund & Son, Archts., Richmond.

### ASSOCIATION AND FRATERNAL

Tex., San Antonio.—Y. M. C. A. let following contracts in connection with various improvements contemplated: A. H. Shafer, plumbing; W. J. Denninger, tile; J. Depuy, cement; W. E. Simpson, general contract; will install 13 additional shower baths, renovate athletic-rooms, install new heaters and tanks, improve outer grounds, construct sidewalks, etc.; cost \$3000.

Va., Petersburg.—Y. W. C. A. let contract to B. F. Keeler, Petersburg, to remodel and improve St. Joseph's Catholic School on Main St. for dormitory; 23 rooms.

### BANK AND OFFICE

Mo., Kansas City.—J. M. Byrne Real Estate Co. let contract to Harvey Silver, Kansas City, to erect office building at Wyandotte and Main Pl.; 36x60 ft.; brick; composition roof; wood floors; electric lights; granite sidewalk; cost \$8000; steam heat \$750; Sheppard, Farrar & Wiser, Archts., Long Bldg., Kansas City.

Okla., Driftwood.—Citizens' State Bank let contract to erect bank building.

Tex., Dallas.—A. G. Spaulding Sporting Goods Co., 1518 Main St., let contract to A. T. Lloyd, Dallas, to erect store and office building; 3 stories.

### CHURCHES

Ark., Waldron.—Waldron Baptist Church let contract to J. L. McCartney, Waldron, to erect walls of church and Sunday-school; 66x66 ft.; brick walls; stone arches; art glass; hip roof, gables and met shingles; bowled floors; hot-air heat; city electric lights; cost about \$10,000; W. A. Rayfield & Co., Archts., Birmingham. Address S. B. Branett. (Lately noted.)

### CITY AND COUNTY

Ga., Quitman.—Theater.—City let contract to remodel opera-house; rebuild front; cost \$4000 to \$5000.

La., Monroe.—Monroe Hardware Co. receives bids until March 3 to erect warehouse; 100x130 ft.; 2 stories; brick; cost \$50,000; plans and specifications from owner and J. W. Smith, Archt., Monroe. (Previously noted.)

Md., Baltimore.—Terminal Warehouse Co. is having plans prepared by Owens & Sisco, Continental Bldg., Baltimore, for warehouse at Thames and Philpot Sts.; 1 story; brick and concrete; 180x400 ft.

N. C., Ayden.—A. L. Curl, Creedmore, N. C., will erect tobacco warehouse; 119x170 ft.; floor space 18,000 sq. ft. or more.

Okla., Tulsa.—Oklahoma State Oil Co. will erect \$200 warehouse.

S. C., Greenville.—Co-operative Investment Co. will erect warehouse on Reedy River to be occupied by American Machine & Mfg. Co.; 1 story; 80 ft. square; J. E. Birrine, Engr. and Archt., Greenville. (Lately noted.)

Tex., San Antonio.—Max A. Krueger will erect warehouse; cost \$9000.

Va., Appomattox.—J. R. Atwood & Co. will erect warehouse. (See Stores.)

Va., Newport News.—War Department, Washington, D. C., will build warehouse at Pier No. 2; 80x60 ft.; 1 story.

### COURTHOUSES

Ga., Lyons.—Toombs County let contract to Little & Phillips, Cordele, Ga., to erect courthouse; fireproof construction; Alexander Blair, Archt., Macon, Ga. (Lately noted.)

Miss., Corinth.—Alcorn County Supervisors, O. M. Hinton, Chancery Clerk, have plans by N. W. Overstreet, Majestic Bldg., Jackson, Miss., and let contract B. G. Parish, Jackson, Tenn., to erect courthouse; 122x96 ft.; fireproof; reinforced concrete, face brick, terra-cotta, ornamental plaster, ornamental and structural iron work; composition roof; reinforced concrete floors; steam heat; cost about \$30,000, without mechanical equipment. (Lately noted.)

Miss., Poplarville.—Pearl River County let contract to Dabbs & Wetmore, Meridian, Miss., to erect courthouse; cost \$85,000; P. J. Krouse, Archt., Maza-Woods Bldg., Meridian. (Previously noted.)

### DWELLINGS

Ark., Little Rock.—Walter E. McClure let contract to erect residence.

Fla., Clearwater.—E. T. Roux, Plant City, Fla., let contract to erect \$7000 bungalow in Clearwater Beach Development.

Fla., Vero.—Miss Lillian Anthony let contract to W. R. Duncan, Vero, to erect 5-room bungalow.

Ga., Albany.—D. L. Bates let contract to J. B. Campbell, Albany, to erect residence; 45x65 ft.; hollow tile and stucco; asphalt slate roof; oak floors; electric lights; cost \$5275.

Md., Baltimore.—C. M. Dodson, Jr., let contract to Geo. W. Bennett, 27 Franklin Bldg., Baltimore, to repair burned residence at 2217 Eutaw Place. (Lately noted.)

Miss., Corinth.—A. C. Smith will erect brick-veneer residence; W. B. McCord, contractor, Corinth.

Miss., Corinth.—Mrs. M. H. McAmes will erect brick residence; W. B. McCord, contractor, Corinth.

Miss., Clarksdale.—J. A. Darden let contract to Boraman Lumber Co., Clarksdale, to erect residence; brick veneer; composition shingle roof; hardwood floors; cost \$12,000; hot-water heat, \$1200; M. M. Alsop, Archt., Clarksdale.

N. C., Charlotte.—Charlotte Consolidated Construction Co. let contract to Fred, D. Blake, R. F. D. No. 8, Charlotte, to erect 9 bungalows on Worthington Ave.; 6 rooms; wood; shingle roofs; cost \$22,000; hot-air heat, \$250 each; F. L. Bonfoey, Archt., Charlotte. (Lately noted.)

N. C., Durham.—E. I. Bugg and Citizens' Investment Co. let contract to W. H. Woods, Durham, to erect four 7-room residences.

N. C., Winston-Salem.—Inverness Mills let contract to J. H. Grubbs, Winston-Salem, to erect 11 cottages and 2 bungalows for mill operatives.

N. C., Winston-Salem.—L. E. Coles let contract to J. E. Kennerly, Winston-Salem, to erect 7-room bungalow.

N. C., Winston-Salem.—T. B. Apperson let contract to J. E. Kennerly, Winston-Salem, to improve residence; will erect addition and remodel structure.

Okla., Newkirk.—Miss Elizabeth Anderson let contract to erect 3 dwellings on 10th St. Tex., Athens.—J. B. Henry has plans by and let contract to Walter G. Shadday, Athens, to erect residence; 48x60 ft.; frame; shingle roof; cost \$5,000.

Tex., Cisco.—Mrs. C. A. Gray let contract to M. L. Howell, Gorman, Tex., to erect residence; 48x54 ft.; brick veneer; galvanized metal shingle roof; hardwood floors; electric lights; concrete sidewalks; cost \$10,000; C. H. Griesbeck, Archt., 316 Davis St., Dallas. (Lately noted.)

Tex., Houston.—Mrs. Letitia Miller let contract to J. D. Carlisle to erect 2 dwellings; 4 and 5 rooms; cost \$2,800.

Tex., San Antonio.—Wm. Dobrowski, 219 St. Mary St., let contract to J. A. Novon, San Antonio, to erect 2 residences; 28x38 ft.; sleeping porch; bungalow style; lumber; cedar shingle roof; clear 4-in. flooring; electric lights; cement sidewalks; cost \$2,000 each. (Lately noted.)

Tex., San Antonio.—F. Cassiano let contract to J. De Puy, Hicks Bldg., San Antonio, to erect residence; brick veneer; asbestos shingle roof; wood floors; hot-air heat; cost \$15,000; H. T. Phelps, Archt., Gunther Bldg., San Antonio.

Va., Portsmouth.—H. A. V. Parker has plans by and let contract to Geo. Flemming, Madison St., Portsmouth, to erect 2-family dwelling and 4-family dwelling on Riverview and Bay Sts.; frame; slate roof. (Lately noted.)

W. Va., Northfork.—L. G. Toney let contract to H. A. Lucas, Kimball, W. Va., to erect store and residence building; 2 stories; brick and cement; Barrett specification roof; steam heat; electric lights; cost \$12,000; Pedigo & Garry, Archts., Bluefield, W. Va. (See Stores.)

### GOVERNMENT AND STATE

Ala., Montgomery.—Camp.—War Dept., Washington, D. C., let contract to Paschen Bros., Chicago, for additions and improvements at Camp Sheridan; reported to expend \$200,000 to enlarge base hospital, build additional storage-houses, install plumbing, etc.

Tex., Houston.—Camp.—War Dept., Washington, D. C., let contract to Horton & Horton, Houston, for \$750,000 additional construction work at Camp Logan.

Va., Richmond.—Aviation Concentration Camp.—War Department, Washington, D. C., let contract to Geo. A. Fuller Co., Fuller Bldg., New York, to build aviation concentration camp on Bellwood Farm, near Richmond; cost \$3,000,000 to \$4,000,000.

### HOSPITALS, SANITARIUMS, ETC.

Ala., Montgomery.—War Dept., Washington, D. C., let contract to Paschen Bros., Chicago, to enlarge base hospital, etc., at Camp Sheridan. (See Government and State.)

Okla., Oklahoma City.—State let contract to Lisle-Dunning Construction Co., Oklahoma City, to erect State hospital; 4 stories; reinforced concrete; brick and stone facing; tar and gravel roof; concrete floors; electric lights; Otis passenger and freight elevators (purchased); cost \$185,000; heating and plumbing, \$34,000; construction begins about March 1; Jewell Hicks, Archt., Oklahoma City and Durant, Okla. (Lately noted.)

Okla., Oklahoma City.—State let contract at \$5000 to Benson & Farrar, Guthrie, Okla., to install water and heating plants in State Emergency Hospital.

### HOTELS

Okla., Picher.—S. Daniels let contract to Picher Cement Block Co., Picher, to erect hotel; 50x100 ft.; completion in 60 days. (Lately noted.)

Okla., Tulsa.—Tulsa Realty Investment Co. let contract to I. J. Buck, 13 S. Carson St., Tulsa, to erect store and hotel building at 212-18 S. Boulder St.; 75x140 ft.; 2 stories; brick and wood; gravel roof; concrete floors; cost \$35,000; John Robb, Archt., 12 S. Boston St., Tulsa.

### MISCELLANEOUS

Ark., Little Rock.—Skating Rink.—N. Schmidt let contract to build roller-skating rink at Belmont at entrance to Camp Pike.

Md., Baltimore.—Clubhouse.—Baltimore Yacht Club, Isaac E. Emerson, Prest., and Commodore, let contract to Wm. H. Parker, Emerson Hotel, Baltimore, to move clubhouse from Fort McHenry to foot of Light St., and remodel; about 82x84 ft.; frame; shingle roof; frame floors; cost about \$12,000; Jos. Evans Sperry, Archt., 409 Calvert Bldg., Baltimore; construct pier 150 ft. long, etc.; J. A. Dinning, Secy., 815 Continental Bldg. (Lately noted.)

### SCHOOLS

Fla., St. Petersburg.—Board of Public Instruction of Pinellas County, Dixie M. Hollis, Supt., Clearwater, Fla., let contract at \$141,422 to Cal F. Thomas Co., St. Petersburg, to erect high school; plans by Wm. B. Ittner, St. Louis, Mo., include administration-rooms, auditorium to seat 1200, 11 recitation-rooms, study-room to accommodate 150 pupils, domestic arts department of 2 rooms, manual training department of 3 rooms, lunchrooms, lockers, gymnasium, 45x80 ft., to seat 700 pupils; also let contract at \$12,000 to General Fire Extinguisher Co., Providence, R. I., for heating plant, and to C. & C. Sheet Metal Works, St. Petersburg, for metal work; will vote on additional bonds for equipment and to remodel present high school for War School. (Previously noted.)

Tex., Denton.—State let contract to J. C. Jopling & Bro., Corsicana, Tex., to erect educational building; 80x150 ft.; 3 stories; fireproof; tile and concrete floors; cost \$70,000; C. H. Page & Bro., Archt., Austin. (Other contracts lately noted.)

### STORES

Ala., Attalla.—W. L. Lawley let contract to erect store building; 2 stories; 30x48 ft.; brick; gravel roof; cost \$4500; A. D. Simpson, Archt., Gadsden. (Lately noted.)

Miss., Corinth.—Corinth Bank & Trust Co. let contract to L. J. Greene, Corinth, to improve store building.

Okla., Driftwood.—Andrews Hardware Co. let contract to erect business building.

Okla., Picher.—W. Jones let contract to Picher Cement Block Co., Picher, to erect business building; completion in 60 days. (Lately noted.)

Okla., Tulsa.—Tulsa Realty Investment Co. let contract to I. J. Buck, 13 S. Carson St., Tulsa, to erect store and hotel building; 2 stories; 75x140 ft.; brick and wood; gravel roof; concrete floors; cost \$35,000; John Robb, Archt., 12 S. Boston St., Tulsa. (See Hotels.)

Tex., Dallas.—A. G. Spaulding Sporting Goods Co., 1518 Main St., let contract to A. T. Lloyd, Dallas, to erect 3-story store and office building.

Tex., Denton.—Will Williams let contract to M. B. Whitlock & Co., Denton, to erect store building; 65x120 ft.; 3 stories separated by brick partitions; brick construction; gravel roof; wood and concrete floors; gas stoves; city electric lights; cost \$8500; construction begins March 15. (Lately noted.)

Tex., Waco.—A. Silverman let contract to W. Smith, Waco, to remodel building on Austin St.; R. E. Lane, Archt., Waco.

W. Va., Northfork.—L. G. Toney let contract to H. A. Lucas, Kimball, W. Va., to erect store and residence building; 2 stories; brick and cement; 25x65 ft.; Barrett specification roof; steam heat; electric lights; cost \$12,000; Pedigo & Garry, Archts., Bluefield, W. Va. (Lately noted.)

### THEATERS

D. C., Washington.—Marcus Notes let contract to D. E. Nichol, 419 Real Estate Trust Bldg., Washington, to remodel theater at 318 Ninth St. N. W.; 25x100 ft.; brick; concrete floors; cost \$11,000; Frank G. Pierson, Archt., Washington Loan & Trust Bldg., Washington. Address contractor. (Lately noted.)

Ga., Quitman.—City will remodel opera-house; rebuild front; contract let; cost \$4000 to \$5000. Address The Mayor.

N. C., Wilson.—Export Tobacco Co. let contract to Bass Bros., Richmond, Va., to erect \$30,000 storage and cooperage plant.

### WAREHOUSES

Md., Baltimore.—C. A. Gambrell Mfg. Co. let contract to Frannie Bros. & Haigley, 13 Clay St., Baltimore, to remodel and erect addition to building at 110 Commerce St. for warehouse; brick and concrete; slag roof; reinforced concrete floors; cost about \$6000; Smith & May, Archts., 1133 Calvert Bldg., Baltimore. (Lately noted.)

## MACHINERY, PROPOSALS AND SUPPLIES WANTED

**Apple Machinery.**—See Canning Machinery.—Old Virginia Orchard Co.

**Ball or Pebble Mill.**—Florence Mining & Milling Co., 1509 Finance Bldg., Philadelphia, Pa.—Ball or pebble mill, capacity of pulverizing 8 to 10 tons average rock material to 60-mesh in 10 hrs.; state make, when built, capacity, power required and where located.

**Bank Fixtures.**—Liberty Bank & Trust Co., J. H. Sharp, Prest., New Orleans, La.—Prices on bank fixtures, safe and vault.

**Belting (Leather).**—Jonesboro Supply House, Jonesboro, Tenn.—Dealers' prices on 60-ft. single leather belting, 2½ or 3-in.; second-hand.

**Bending and Cutting Machinery.**—See Cutters (Angle Iron).—Cotton Picker Co.

**Boilers.**—Sanitary Cleaning Co., M. G. Sheppard, Mgr., Newberry, S. C.—Prices on 5 H. P. and 12 H. P. boiler. (See Laundry Machinery.)

**Boiler.**—John S. Dix & Co., Crockett, Va.—Prices on boiler for cannery. (See Canning Machinery.)

**Boiler.**—John G. Duncan Co., 308 W. Jackson Ave., Knoxville, Tenn.—Dealer's price on 150 H. P. return-tubular boiler; 100 to 125 lbs. working pressure; quick delivery.

**Boiler.**—N. P. Nelson Iron Works, 403 at 30 Church St., New York.—100 H. P., 125-lb. insurance steam-pressure return tubular boiler; 80-ft. stack; second-hand will do; delivery at Martinsburg, W. Va.

**Boring Bars.**—Dorchester Lumber Co., Badham, S. C.—Prices on Underwood standard portable cylinder boring bar.

**Boring Mills.**—W. O. Arzinger Machinery Co., Nashville, Tenn.—Prices on boring machines; Lucas or Bullard preferred. (See Foundry Equipment, etc.)

**Boiler (Return Tubular).**—Jonesboro Supply House, Jonesboro, Tenn.—Dealers' prices on 30 H. P. return tubular boiler; second-hand.

**Brick.**—Graff Bros. & Co., 219 25th St., Newport News, Va.—Common brick and lumber for 30 two-story frame residences.

**Brick Machines (Cement).**—John P. Guernsey & Co., R. D. McCaughin, Purchasing Agent, Strickland Bldg., Roanoke, Va.—Data and prices on machinery for making solid brick of mixture of slag (not ground) and cement.

**Bridge (Steel).**—Clarke County Supvrs., W. H. Foster, Clerk, Quitman, Miss.—To let contract March 5 for steel bridge.

**Building Materials.**—Imperial Auto Wheel Co., W. W. McCauley, Secy., 7 Court Place, Hagerstown, Md.—Prices on building materials. (See Machine-shop Equipment.)

**Canning Machinery.**—John S. Dix & Co., Crockett, Va.—Prices on equipment for canning, including boiler.

**Canning Machinery.**—Old Virginia Orchard Co., Front Royal, Va.—Prices on canning machinery; four 8000-gal. wood tanks, steam jacket kettles, apple corers, quarterers, etc.; labeling machine, juice sterilizer, steam water pump and smokestack.

**Cars.**—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky.—Prices on 20 second-hand standard-gauge wooden box cars, 40,000 to 60,000 lbs. capacity.

**Cars (Logging).**—Dorchester Lumber Co., Badham, S. C.—Prices on 12 logging cars, 36-in. gauge, 24-in. wheels.

**Conveying Machinery.**—See Washing and Excavating Machinery, etc.—Southern Steel Products Co., 501 Virginia Railway & Power Bldg., Richmond, Va.—Dealers' prices on conveying machinery for gravel and sand. (See Washing and Excavating Machinery.)

**Corn.**—See Grist and Feed Mills, etc.—John P. Howland, Jr.

**Cranes.**—W. O. Arzinger Machinery Co., Nashville, Tenn.—Prices on cranes. (See Foundry Equipment, etc.—W. O. Arzinger.)

**Cranes.**—Bureau Yards and Docks, Navy Department, Washington, D. C.—Bids until March 4 for furnishing and installing two 200-ton, 100-ton, three 25-ton, three 20-ton, nine 15-ton, 10-ton and two 5-ton overhead electric traveling bridge cranes at navy yard, Washington; drawing and specification (No. 275) on application to Bureau or to Commandant of navy-yard named.

**Cutters (Angle Iron).**—Cotton Picker Co. of America, 1539 Marquette Bldg., Chicago, Ill., and 1102 Candler Bldg., Atlanta, Ga.—

Prices on angle iron machine bender and cutter.

**Crusher.**—Tennessee Manganese Co., D. C. Campbell, Prest., Knoxville, Tenn.—Bids on crusher for 25 tons ore daily.

**Dredging.**—Fayette County Drainage Dist., No. 1 Commrs., Lester C. Dickson, Secy., Fayetteville, Ga.—Bids until Mch. 14 for dredging Camp Creek, in western part of Clayton county and northeastern part of Fayette county; floating dredge work; 2 lateral ditches to be excavated; main ditch 9½ mi. long, 236,500 cu. yds. excavation; Dodd and McLeary branches, 13,500 cu. yds. excavation and 60 acres clearing; other items force account and percentage; plans and specifications at office of S. E. Davidson, Chrmn., Helmer, Ga. (P. O. Kenwood), and office of Knox T. Thomas, Engr., 502 Forsyth Bldg., Atlanta.

**Drills (Radial).**—Marine Repair Corp., H. Haycock, Gen. Mgr., Newport News, Va.—Prices on 4-ft. radial drill. (See Machine-shop Equipment.)

**Electric-light Plant.**—Town Council, L. Grubbs, Clerk, Oak Grove, La.—Officers for franchise to install electric-light plant; 800 population.

**Electrical Equipment.**—Kingston Ice & Light Co., G. F. Blethen, Prest.-Mgr., Kingston, Okla.—Prices on second-hand, 5 K. W., 6.6 amp., street series switchboard for 2300, 60 cycle, 3 phase.

**Electrical Equipment.**—Bank of Lagrange, R. L. Bender, Prest., Lagrange, Ga.—Prices on electrical equipment for bank building to be remodeled.

**Elevator.**—State Hospital for Insane, Albert Anderson, Supt., Dix Hill, Raleigh, N. C.—Bids until March 14 for elevator for building to be erected at State Hospital for Insane; drawings and specifications from Harry Barton, Archt., Greensboro, N. C.

**Elevator (Electric).**—Old Virginia Orchard Co., Front Royal, Va.—Prices on 3-story electric elevator. (See Canning Machinery.)

**Engines (Oil).**—Granbury Cotton Oil Co., Granbury, Tex.—150 H. P. crude-oil engine, either D. C. to generator or belted; 250 to 300 H. P. crude-oil engine, direct connected or belted type; new or second-hand.

**Engine.**—R. P. Johnson, Wytheville, Va.—Dealer's price on 100 H. P. simple, automatic or Corliss engine only; good second-hand condition.

**Excavation.**—Potacocaw Creek Drainage District Commrs., C. W. Mullen, Prest., Grenada, Miss.—Bids received Feb. 28 to construct 461,500 cu. yds. earth embankment for levees and excavation for drainage channel in Carroll and Grenada counties; probably dragline excavator work but will consider bids based on other types of equipment; Morgan Engineering Co., Engr., Memphis, Tenn.

**Flour-mill Machinery, etc.**—J. J. Slevin, 330 Franklin Place, Plainfield, N. J.—Data and prices on flour and grain-milling machinery for small plants.

**Foundry Equipment, etc.**—W. O. Arzinger Machinery Co., Nashville, Tenn.—Prices on foundry equipment; also heavy machine tools, such as planers, boring mills (Lucas or Bullard preferred), milling machines, lathes, drill presses and cranes.

**Gas-plant Engineers.**—T. B. O'Steen, Commissioner Public Institutions, etc., Lakeland, Fla.—To correspond with gas-plant engineers relative to obtained valuations.

**Generator Sets, etc.**—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until Mch. 23 for generator sets, switchboards, copper cable, end bells, transformers, connectors, terminals, receptacles, copper rod, bus-bar supports, pipe fittings and floor flanges; blanks, etc., relating to circular (No. 1293) obtainable at this office or offices Asst. Purchasing Agents, 24 State St., New York; 606 Common St., New Orleans, and Fort Mason, San Francisco; also from United States Engr. offices in principal cities throughout United States.

**Grist and Feed Mills, etc.**—John P. Howland, Jr., Dade City Ginnery & Feed Mills, Dade City, Fla.—Prices on grist mill; feed mill for grinding beans; corn in ear.

**Hardware.**—Bureau Supplies and Accounts, Navy Department, Washington, D. C.—Bids until March 5 for delivering chest handles, hasps, hinges, hooks and locks at Norfolk navy-yard; apply for proposals to supply officer, navy-yard, or to Bureau.



**Heating Equipment.**—Bank of Lagrange, R. L. Rander, Prest., Lagrange, Ga.—Prices on heating equipment for bank building to be remodeled.

**Heating Plant.**—State Hospital for Insane, Albert Anderson, Supt., Dix Hill, Raleigh, N. C.—Bids until March 14 for heating plant for building to be erected at State Hospital for Insane; drawings and specifications from Harry Barton, Archt., Greensboro, N. C.

**Heating Plant.**—Department of Interior, office Cato Sells, Commr. of Indian Affairs, Washington, D. C.—Bids until March 11 to install heating plant at Cherokee Orphan Training School, Park Hill, Okla.; plans, specifications, etc., on file with United States Indian Warehouse at Chicago, St. Louis and San Francisco, Builders' Exchange, St. Paul, Minn., and Supt. of Cherokee Orphan Training School, Park Hill; for further information address Supt. of School.

**Kettles (Steam Jacket).**—Old Virginia Orchard Co., Front Royal, Va.—Prices on steam jacket kettles. (See Canning Machinery.)

**Lathes.**—See Foundry Equipment, etc.—W. O. Arzinger.

**Laundry Machinery.**—Sanitary Cleaning Co., M. G. Sheppard, Mgr., Newberry, S. C.—Prices on 5 H. P. boiler; 12 H. P. boiler; laundry machinery; laundry wagons; electric motors; etc.

**Lumber.**—T. L. Bass, Chester, S. C.—Prices on 10,000 to 15,000 ft. rough framing.

**Lathe.**—Jonesboro Supply House, Jonesboro, Tenn.—Dealers' prices on 14-in. swing, 6-ft. bed lathe; second-hand.

**Lathe (Engine).**—Marine Repair Corp., H. Haytock, Gen. Mgr., Newport News, Va.—Prices on 24 or 30-in. hollow-spindle engine lathe. (See Machine-shop Equipment.)

**Lumber.**—Graff Bros. & Co., 219 25th St., Newport News, Va.—Lumber for 20 two-story frame residences.

**Lead.**—Ralph G. Taylor, Contr., Texarkana, Ark.—Prices on lead.

**Locomotive.**—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky.—Prices on second-hand standard-gauge 8 to 20-ton straight connected or geared locomotive.

**Machine-shop Equipment.**—Marine Repair Corp., H. Haytock, Gen. Mgr., Newport News, Va.—Prices on 24-in. or 30-in. hollow spindle engine lathe; slotter 12 or 16 in.; radial drill 4 ft.; planer 36x36 in.

**Machine-shop Equipment.**—Imperial Auto Wheel Co., W. W. McCauley, Secy., 7 Court Place, Hagerstown, Md.—Prices on electric motors; building materials; general automatic machinery for machine shop; will manufacture steel automobile wheels.

**Metal Corner (Street Curbing).**—McClamrock Builders Supply Co., Greensboro, N. C.—Addresses of manufacturers of metal corners for street curbing.

**Milling Machines.**—W. C. Arzinger Machinery Co., Nashville, Tenn.—Prices on milling machines. (See Foundry Equipment, etc.)

**Millwork.**—Ralph G. Taylor, Contr., Texarkana, Ark.—Prices on millwork. (Has sewage-disposal construction contract.)

**Mining Equipment.**—Tennessee Manganese Co., D. C. Campbell, Prest., Knoxville, Tenn.—Bids on mining machinery for 25 tons ore daily.

**Mining Machinery (Graphite).**—Madagascar Graphite Co., 701 First National Bank Bldg., Birmingham, Ala.—Bids on graphite-mining machinery.

**Mining Machinery (Coal).**—Rockhouse Coal Co., Second National Bank Bldg., Toledo, Ohio.—Prices on coal-mining machinery for installation Indian Bottom, Ky.

**Motor (Electric).**—Guyan Machine Shops, Logan, W. Va.—150 H. P., 3-phase, 0-cycle, 2200-volt, 550 R. P. M. motor.

**Motors (Electric).**—Imperial Auto Wheel Co., W. W. McCauley, Secy., 7 Court Place, Hagerstown, Md.—Prices on electric motors. (See Machine-shop Equipment.)

**Motors (Electric).**—Sanitary Cleaning Co., M. G. Sheppard, Mgr., Newberry, S. C.—Prices on electric motors. (See Laundry Machinery, etc.)

**Motors (Electric).**—Granbury Cotton Oil Co., Granbury, Tex.—Two 50 H. P. alternating motors; 65 H. P. alternating motor; 75 H. P. alternating motor; 25 H. P. alternating motor; 40 H. P. alternating motor; two 50 H. P. D. C. motors; 75 H. P. D. C. motor; two 65 H. P. D. C. motors; two 24 H. P. D. C. motors; 75 H. P. D. C. motor; 45 H. P. D. C. motor; new or second-hand.

**Oil.**—State Roads Com., Frank H. Zouck, Chrmn., 601 Garrett Bldg., Baltimore, Md.—Bids until March 5 for oiling 2 sections of State Highway as follows: No. 5, Montgomery (part), Frederick, Howard, Carroll and Washington (part) counties, 187.82 mi., 506,976 gals.; No. 6, Washington (part), Allegany and Garrett counties, 122.62 mi., 271,310 gals.; total 310.44 mi.; 778,286 gals.; specifications and plans obtainable from Com.; bids to be made on blank form contained in book of specifications.

**Oil Expellers.**—Consolidated Products Co., 21 Park Row, New York.—Prices on several Anderson oil expellers, preferably No. 1 end drive.

**Paper Roofing.**—C. C. Bancroft, care of Union Hotel, Meridian, Miss.—Addresses of manufacturers of paper roofing, made purely from asphalt base; also of makers of the paper.

**Paving.**—Fulton County, C. M. Holland, Purchasing Agent, 507 Courthouse, Atlanta, Ga.—Bids until March 23 to pave Peachtree Road, from city limits to Buckhead, with concrete, bituminous concrete, vitrified brick or patented pavement; 4 sections of 15,000 yds. each; for specifications and other information address Mr. Holland.

**Pipe (Wood).**—Florida Beach Development Co., 721 Citizens' Bank Bldg., Tampa, Fla.—Data and prices on wood tubing or pipe, suitable for suburban water systems or irrigating plants.

**Piping, etc.**—Belmont-Willett-Brown Oil Co., 319 Central National Bank Bldg., Tulsa, Okla.—Bids on pipe and casing; 500 ft. 15½-in., 1400 ft. 12½-in., 1800 ft. 10-in. and 2400 ft. 8½-in. pipe.

**Pipe and Fittings (Galvanized Iron).**—Ralph G. Taylor, Contr., Texarkana, Ark.—Prices on galvanized-iron pipe and fittings; for sewage-disposal-plant work.

**Planers.**—W. O. Arzinger Machinery Co., Nashville, Tenn.—Prices on planers. (See Foundry Equipment, etc.)

**Planer.**—Marine Repair Corp., H. Haytock, Gen. Mgr., Newport News, Va.—Prices on 36-in. x 36-in. planer. (See Machine-shop Equipment.)

**Plumbing.**—Treasury Department, Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C.—Bids until March 19 for toilet-room for women in U. S. Custom House, Norfolk, Va.; drawings and specifications from custodian, Norfolk, and Mr. Wetmore, Washington.

**Pipe (Cast-iron).**—Hackley Morrison, 204 Moore Bldg., 16½ N. 9th St. (also P. O. Drawer 1337), Richmond, Va.—Prices on several tons 3-in. and 4-in. cast-iron bell and spigot pipe; new or second-hand in good condition.

**Presses (Drill).**—See Foundry Equipment, etc.—W. O. Arzinger.

**Pump (Steam; Water).**—See Canning Machinery.—Old Virginia Orchard Co.

**Rails.**—Room 27, 156 Broadway, New York. Prices on 2 mi. standard-gauge track, complete with 65-lb. to 85-lb. rails, angle bars and cross-ties; will move.

**Rails.**—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky.—Prices on 1 or more carloads 90-lb. first-class relaying steel rail, complete with angle bars.

**Rails.**—George Yampolsky, P. O. Box 305, Clarksburg, W. Va.—16 and 20-lb. relaying rails; bent rails up to 45 lbs.

**Road Machinery.**—City of Ocala, Fla., J. N. Johnson, Mayor.—Prices on light road scarifier and scraper; steam or oil driven.

**Roofing.**—T. L. Bass, Chester, S. C.—Prices on 35 to 40 squares galvanized iron siding and roofing.

**Roofing Paper.**—See Paper Roofing.—C. C. Bancroft.

**Safe.**—Beaver Valley State Bank (W. L. Stumbo and others), Weeksburg, Ky.—Prices on safe for bank building.

**Safe.**—See Bank Fixtures.—Liberty Bank & Trust Co.

**Screens.**—See Washing and Excavating Machinery, etc.—Southern Steel Products Co.

**Shovel (Steam).**—S. S. C., care Manufacturers Record, Baltimore, Md.—Steam shovel, mounted on standard-gauge trucks, 1 or 1½-yd. dipper, full digging radius, for heavy work; good operating condition.

**Siding.**—See Roofing.—T. L. Bass.

**Stack (Smoke; Iron).**—Old Virginia Orchard Co., Front Royal, Va.—Prices on iron smokestack. (See Canning Machinery.)

**Steel Furnace.**—Tennessee Manganese Co., D. C. Campbell, Prest., Knoxville, Tenn.—Bids on steel furnace converting ore into ferro-manganese; 25 tons ore daily.

**Truck (Motor).**—City of Kinston, N. C., W. B. Coleman, Clerk.—Bids until March 4 for motor truck, 1 and 2-ton capacity.

**Vault.**—See Bank Fixtures.—Liberty Bank & Trust Co.

**Vault Door.**—Beaver Valley State Bank (W. L. Stumbo and others), Weeksburg, Ky.—Prices on vault door for bank.

**Washing and Excavating Machinery, etc.**—Southern Steel Products Co., 501 Virginia Railway & Power Bldg., Richmond, Va.—Dealers' prices on complete equipment for excavating, washing, screening and conveying gravel and sand.

**Valves (Gate).**—Ralph G. Taylor (Contr. for sewage-disposal plant), Texarkana, Ark.—Prices on gate valves.

**Wagon (Laundry).**—Sanitary Cleaning Co., M. G. Sheppard, Mgr., Newberry, S. C.—Prices on laundry wagon. (See Laundry Machinery, etc.)

**Wharf.**—Bureau Yards and Docks, Navy Dept., Washington, D. C.—Bids until Mar. 11 for fuel oil wharf, about 500 ft. long by 40 ft. wide, having an approach about 2160 ft. long and 20 ft. wide, all constructed of timber on creosoted piles, braced with creosoted timbers, at Fuel Oil Station near Yorktown, Va. Drawings and specification No. 223 obtained on application to Bureau.

**Weed Killer (Chemical).**—City of Ocala, Fla., J. N. Johnson, Mgr.—Prices on liquid weed killer in barrel lots.

## RAILROAD CONSTRUCTION

Ala., Mobile.—Tennessee Coal, Iron & Railroad Co. will build 5 mi. of belt line railroad, heavy construction, in connection with the Chickasaw shipbuilding plant near Mobile. Geo. Gordon Crawford, Birmingham, Ala., is Prest.

Ala., Mobile.—Gulf, Mobile & Northern Railroad, it is reported, will build a branch to the Chickasaw Shipbuilding Co.'s plant near Mobile. B. V. Wright, Laurel, Miss., is Chief Engr.

Ga., Savannah.—Proposed line of the Chatham County Traction Co. to the Brampton tract of the Foundation Shipbuilding Co. will be built by local forces. All material on hand. H. C. Foss, Mgr., Savannah Electric Co., and others interested.

Ky., Whitesburg.—Louisville & Nashville Railroad is reported to have let contract to Byers & Codell of Winchester, Ky., to build 1½ mi. coal branch up Thornton Creek.

N. C., Wilmington.—Wilmington, Brunswick & Southern Railroad is authorized to build an extension from Atwood, N. C., to Fort Caswell, about 12 mi. Estimated cost about \$140,000. M. J. Corbett, Wilmington, N. C., is Prest. Work is begun.

Okla., Collinsville.—D. H. Siggins of Coffeyville, Kan., is reported working on plan to build electric interurban railway from Collinsville to Nowata, Okla., Coffeyville and other points.

Okla., Guthrie.—Atchison, Topeka & Santa

Fe Railway, it is reported, plans to spend about \$150,000 to improve its yards in Guthrie. H. W. Wagner, Topeka, Kan., is Chief Engr.

Tex., Houston.—Contract is let to the Houston Construction Co. to build the first section of the Municipal Belt Railway, about 4 mi.

W. Va., Williamson.—Norfolk & Western Railway, it is reported, will build an extension of about 4 mi. to the Pond Creek Railroad which runs from Williamson into Pike County, Ky., the object being to serve new coal mines. J. E. Crawford is Chief Engr. at Roanoke, Va.

W. Va., Fairmont.—Construction of several extensions is contemplated by the Monongahela Valley Traction Co. viz.: Clarksburg to Salem, Clarksburg to Philippi, Clarksburg to Grafton, Weston to Orlando, and Fairmont to Morgantown. J. O. Watson of Fairmont is Prest.

## INDUSTRIAL NEWS OF INTEREST

### Change of City Offices.

The C. W. Hunt Company, Inc., of West New Brighton, N. Y., announces that it has removed its New York City offices from 50½ Broadway to the Astor Trust Bldg., 501 Fifth Ave., at the corner of 42nd St., the new telephone numbers being 129-121 Murray Hill. This change resulted from the United States

Government taking for its own use the entire building in which the company's city offices were formerly located.

### "Great Bear" a New High Speed Steel.

Announcement is made by the Fulton Steel Corporation that its Heroult Electrical plant is in successful operation at Fulton, N. Y., making alloy steel of different kinds, viz.: nickel, chromium, ball-bearing, magnet, etc. It has a capacity to melt about seventeen tons a day. All of the company's steel is melted under the personal supervision of Irving H. Valentine, its metallurgist, who for the last several years has had entire charge of the Heroult Electric plant of the General Electric Co. His newest discovery is the Fulton Steel Corporation's "Great Bear" brand of high speed steel which it is claimed is of unusual hardness, possessing extraordinary resistance to wear. He has also made many other important inventions in his metallurgical work.

### Ice and Refrigerating Machinery.

In the period from January 19 to February 22 the York Manufacturing Co. made forty-six separate installations of ice and refrigerating machinery in various parts of the country, including seventeen for concerns in the South and the Southwest as follows: Carolina Packing Co., Wilmington, N. C.; National Army Cantonment Hospital, Atlanta, Ga.; Natural Gas Products Co., Fall Off, W. Va.; Al. Bickers, dairy, Bellevue, Ky.; Ben. Fipp, meats, Newport, Ky.; Seguin Creamery, Seguin, Tex.; Richmond Terminal, Richmond, Va.; William G. Held Bottling Works, Nacogdoches, Tex.; Nissley Creamery Co., Amarillo, Tex.; Galveston Ice & Cold Storage Co., Galveston, Tex.; Schulenberg Light & Ice Co., Schulenberg, Tex.; David Dick & Son, Charleston, W. Va.; Dixie Ice Cream Works, Savannah, Ga.; Hahn Ice Cream Co., Charleston, S. C.; White Eagle Dairy Co., Columbia, Mo.; Purify Ice & Bottling Co., Wagoner, Okla.; Theo. W. Martens Ice & Coal Co., St. Louis, Mo.

## Book Reviews.

**Efficiency Methods.** B. M. McKillop, M.A., and A. D. McKillop, B.Sc. (Eng.), C.E. New York: D. Van Nostrand Company. Price \$1.50.

This book is an adequate exposition of efficiency methods in industrial operations, otherwise known as scientific management. Its introduction considers the pioneer work done in this line by the late Dr. F. W. Taylor, and subsequent work by Harrington Emerson and others. Succeeding chapters relate to management, modifications in organization, as to planning, cost, foremen, standardization and classification, standardization of equipment and methods, remuneration, welfare work, trades-unions, education, and the installation of efficiency methods. Several illustrations illumine the text. Every employer of labor can find something instructive and entertaining in the pages of this book. It tells what not to do as well as what to do to obtain improved results. The volume is excellently prepared by the publishers, both as to presswork and binding, and it is, moreover, of convenient size.

## FINANCIAL NEWS

### FINANCIAL CORPORATIONS

Ala., Bridgeport.—American National Bank has made application for charter, capital \$25,000.

Ark., Altus.—German-American Bank is reported to have decided to change its name to the Bank of Altus.

Ark., Huntington.—First National Bank has made application for charter; capital \$25,000.

Fla., St. Petersburg.—Florida Bank of St. Petersburg, succeeding the Florida Bank & Trust Co., is organized; capital \$50,000. Nat. B. Brophy, Prest.; A. T. Blocker, V.P.; L. C. Morrow, Cashier; H. D. Edwards, Asst. Cashier.

Ga., Atlanta.—Central Investment Co., capital \$100,000 to \$500,000. Incorporators: A. W. Smith, T. A. Hammond and V. L. Smith.

Ga., Atlanta.—Phoenix Investment Co., capital \$500,000, incept. by S. Gholdstein, B. Mays and others.

Capital and Surplus  
\$4,000,000



Total Resources  
\$38,000,000

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SUMMERFIELD BALDWIN, Vice-Pres.  
CLINTON G. MORGAN, Cashier.  
JOSEPH W. LEFFLER, Asst. Cashier.  
WILLIAM R. WEBB, Asst. Cashier.  
Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals Invited.

### Maryland Trust Company

BALTIMORE

Capital \$1,000,000

TRANSACTS A GENERAL TRUST AND  
BANKING BUSINESS

Correspondence and Interviews  
Invited

Philadelphia Detroit Dallas New Orleans

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Capital and Surplus \$3,000,000

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CHAS. R. BURNETT, Vice-President

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### GEO. B. EDWARDS

(Broker)

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Ga., Macon.—Fourth National Bank of  
Macon has purchased controlling interest in  
the Continental Bank & Trust Co.

Ga., Rebecca.—The Peoples' Bank, capital  
\$15,000, is being organized by Dr. W. J. Dick-  
son, A. B. Bullington, Warren Paulk, W. J.  
Lewis, V. G. A. Tallent, M. L. Story, H. J.  
Berry and E. E. Sego.

Ky., Weeksbury.—Beaver Valley State  
Bank chartered; capital \$25,000; surplus  
\$2500. Incptrs.: B. F. Combs and W. S.  
Wells, Prestonburg, Ky.; W. L. Stumbo, Earl  
A. Stumbo, C. W. Rhodes and C. C. Dunn,  
Weeksbury, Ky.

La., New Orleans.—Liberty National Fire  
Insurance Co., capital \$1,750,000, is organ-  
ized with the following officers: Captain  
C. H. Teal, Colfax, Pres.; G. A. Foster,  
Active V.-P.; W. M. McCraney of Hammond,  
Secy.; W. L. Ward, Treas.; L. E. Hall, Gen.  
Counsel, and C. G. Reeves, Jr., Auditor.

La., New Orleans.—Liberty Bank & Trust  
Co. Incptd., capital \$300,000; surplus \$30,000.  
Business is to begin in about 90 days. Direc-  
tors: James H. Sharp, Pres.; W. T. Nolan,  
Charles M. Hero, C. J. Rogers and Samuel  
P. Schwing, New Orleans; A. B. Hundley,  
Alexandria, and others.

Miss., Heidelberg.—A new bank is reported  
being organized by a Mr. Kuykendall of Bir-  
mingham, Ala.

N. C., Roxboro.—First National Bank of  
Roxboro has made application for charter;  
capital \$50,000; surplus \$5000. Incorporators:  
R. A. Burch, J. C. Pass, W. T. Pass, H. W.  
Winstead, S. G. Winstead, G. T. Thaxton  
and others. Business is to begin as soon  
as charter is granted.

N. C., Winston-Salem.—The report last  
week that the Tucker-Ward Insurance Co.  
had been chartered was a mistake owing to  
an error in telegraphing. It is a hardware  
company.

Okla., Picher.—A new national bank capi-  
talized at \$25,000 is being organized by C.  
W. Rogers and Dr. V. H. Greenwood, Buffalo.

Okla., Sapulpa.—Union Abstract Co., capi-  
tal \$12,000, is chartered; incorporators, W. L.  
McEuen, Ruby McEuen and H. U. Bartlett.

Okla., Tulsa.—Atlas Life Insurance Co. of  
Tulsa is organized with \$1,000,000 capital.  
H. O. McClure is Pres., and Dr. S. De Zell,  
Secy. and Medical Director. Among the  
organizers are Cyrus S. Avery, G. T. Braden,  
Frank A. Baker, W. E. Brown, A. E. Brad-  
shaw and Henry E. Byrne.

S. C., Florence.—Southern Life & Trust  
Agency, Inc., capital \$50,000. P. W. Wilson,  
Pres.; L. B. Harper, V.-P. and Mgr.

S. C., Ruby.—Farmers' Bank of Ruby is  
chartered; capital \$10,000. T. H. Burch,  
Pres.; R. M. Newson, V.-P. and M. L.  
Raley, Secy. and Treas.

S. C., Sharon.—Planters' Bank, capital \$35-  
000, will begin business March 1. W. L.  
Hill, Pres.; Chas. O. Burruss, V.-P.; Clyde  
B. Ratchford, Cash.

Tenn., Collinwood.—A new bank is to be  
established. N. C. Jeter and Jay C. Yenser,  
Pres. and Cashier, respectively, of the Bank  
of Waynesboro, will have charge of the new  
bank.

Tenn., Memphis.—Guaranty Bank & Trust  
Co., capital \$500,000, has begun business at  
156 Madison Ave. Frank Hayden, Pres.;  
L. C. Humes, V.-P. and Cash.; Julian  
Aymett, Asst. Cash.; Clyde T. Denton, Secy.

Tex., Douglasville.—Citizens' Bank of  
Douglasville, private, has applied for charter  
for State bank. Capital \$15,000. Direc-  
tors: A. D. Morris, Pres.; A. C. Oliver, Jr.,  
Cash.; R. B. McWhorter, Lee Hunt, R. P.  
Rutland, Dr. A. C. Oliver and J. P. Smith.  
Business began Feb. 19.

Tex., Houston.—Houston Morris Plan Bank  
is chartered; capital \$100,000. Business is to  
begin about March 1, with Ennis Cargill,  
Pres. and Treas.; Paul B. Thompson, V.-P.;  
J. W. Hertford, Mgr. and Secy.

Tex., Scurry.—First State Bank of Scurry  
has begun business; capital \$10,000. George  
Riddle, Dallas, Pres.; H. L. Gamble, Cash.

Va., Appomattox.—People's National Bank  
is reported organized with \$25,000 capital.

W. Va., Huntington.—Fidelity Insurance  
Agency chartered, capital \$50,000. Incorporators:  
C. A. Staats, Frank Enslow, R. W.  
Schenerelein, H. P. Aleshire and Thomas W.  
Harvey.

## NEW SECURITIES

Ala., Foley.—(Light).—\$3000 of 5 per cent.  
\$500 denomination bonds, dated Feb. 18, 1918,  
and maturing Feb. 18, 1928, have been pur-  
chased at par by the State Bank of Foley.

Fla., Clearwater.—(School).—Following dis-  
tricts in Pinellas County have voted bonds:  
Tarpon Springs, \$6000; Lealman, \$6500. Dixie  
M. Hollins is Secy. Board of Public Instruc-  
tion.

Fla., Dade City.—(Street).—\$5000 of 5 per  
cent. \$1000 denomination bonds are voted.  
Dated March 1, 1918; maturity March 1, 1928.  
A. F. Price is Pres. City Council; Arthur  
L. Auvil, City Atty.

Fla., De Land.—(Road).—The north end of  
Volusia County has voted \$20,000 of bonds  
for Tampa-Jacksonville road. Address  
County Commrs.

Fla., Fort Myers.—(Loan).—The \$35,000 of  
bonds to pay off floating indebtedness to be  
voted on March 26 will run 1-7 years and  
bear 6 per cent. H. E. Heitman is Pres.  
of Council, and Jno. W. Owens, City Clerk.

Fla., Fort Pierce.—(School).—Election is to  
be held March 26 to vote on \$25,000 of bonds,  
School Dist. No. 11 (Vero), St. Lucie County.  
Address County Bd. of Education.

Fla., Lakeland.—(Floating Indebtedness).—  
Election is to be called to vote on \$30,000 of  
bonds to take up floating indebtedness. John  
F. Cox is Mayor.

Fla., New Smyrna.—(Water).—\$10,000 of 6  
per cent. bonds have been purchased by the  
Fidelity Bank, New Smyrna.

Fla., Quincy.—(City Bonds).—Bids will be  
received until 11 A. M. April 1 for \$18,000 of  
5 per cent. \$500 denomination bonds, maturing  
May 1, 1919, to 1936, inclusive. Address  
J. P. Smith, City Clerk. W. E. Shaffer is  
Pres. City Council. Further particulars  
will be found in the Proposals Department.

Ga., Atlanta.—(Fire Department, Water,  
etc.).—Election is to be held March 25 to  
vote on \$125,000 fire department; \$500,000  
water-works; \$100,000 cyclorama and museum,  
and \$75,000 municipal electric generating  
plant, 4½ per cent. 30-year bonds. Asa G.  
Candler is Mayor.

Ga., Macon.—(City Auditorium, sewer,  
street indebtedness).—Question of issuing  
\$300,000 of bonds to complete city auditorium  
and sewer system and to pay street indebted-  
ness, is reported under consideration. Glen  
Toole is Mayor.



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Mid., Cumberland—(School).—After July 1 Allegany County will issue \$75,000 of not exceeding 5 per cent. 15-year bonds. Denomination \$100 to \$1000, to suit purchaser. Dated July 1, 1918. Angus Ireland is Clerk County Commrs.

Miss., Booneville—(School).—Election is to be held March 4 to vote on \$25,000 of bonds. W. W. Lacy is Mayor, and L. D. Rinehart, Clerk.

Miss., Greenville—(School).—\$18,000 Arcola Consolidated School District, Washington County, bonds have been purchased by the Greenville Savings & Trust Co.

Miss., Grenada—(Drainage).—Bids will be received until 10 A. M. Feb. 28 for not exceeding \$70,000 of 14-year bonds Potacocawa Drainage District, Grenada and Carroll counties. Interest not exceeding 6 per cent. C. W. Mullen is Pres. Board of Commrs.

Miss., Hazlehurst—(Road).—\$30,000 of District 1, Copiah County bonds have been purchased by the Bank of Hazlehurst.

Mo., St. Joseph—(Road, Culvert).—\$500,000 of an authorized issue of \$2,000,000 of 5 per cent. bonds have been purchased at 99.06 by the Commerce Trust Co. of Kansas City.

N. C., Boone—(Road).—Bids will be received until 10 A. M. April 1 for \$50,000 of 5 per cent. 5-30-year Watauga County bonds. W. R. Gragg is Clerk Board of County Commrs. Further particulars will be found in the Proposals Department.

N. C., Durham—(Street).—Notice is published of an ordinance authorizing the issuing of \$250,000 of 6 per cent. 10-20-year bonds. Geo. W. Woodward is City Clerk.

N. C., Rutherfordton—(Road).—Rutherford County 6 per cent. \$1000 denomination township bonds have been sold at par as follows: \$30,000 Colfax, to the Bank of Ellenboro, and \$15,000 High Shoals, to the Haynes Bank.

N. C., Rutherfordton—(Road).—Bids will be received until 1 P. M. March 14 for the following 6 per cent. Rutherford County township bonds, dated March 14, 1918: Cool Springs, \$5613; Rutherfordton, \$4176; Green Hill, \$1172; Chimney Rock, \$789. Bonds are of \$1000 denomination, except in Chimney Rock, which will be only \$789. Address J. D. Hull, Clerk Board of County Commrs. G. F. Watson is Chrmn.

N. C., Reidsville—(Improvement, Funding, Sewer).—Bids will be received until noon March 4 for \$115,000 improvement, \$75,000 funding, \$10,000 sewer 6 per cent. bonds, dated Feb. 1, 1918, and maturing 1920 to 1937, inclusive. E. B. Ware is Town Clk.

N. C., Selma—(School).—Bids will be received until noon March 25 for \$22,000 of 5 per cent. bonds, Selma Graded School Dist., dated Jan. 1, 1918; maturity Jan. 1, 1919 to 1934 inclusive. M. C. Winston is Chrmn. and W. H. Call, Secy.

Okla., Blackwell—(Water, Light, Fire Apparatus).—Election is to be held March 5 to vote on \$77,500 water-works, \$82,500 electric-light and \$15,000 fire fighting apparatus bonds. Address The Mayor.

Okla., Bristow—(Light).—Election to vote on \$36,000 electric-light plant and improvement bonds is to be held March 12. Address The Mayor.

Okla., Drumright—(Schools).—Bids will be opened March 10 for \$235,000 of 5 per cent. 20-year \$1000 denomination bonds. Address W. C. French, care of Board of Education. (Recently noted.)

Okla., Enid—(City Hall).—Election will probably soon be held to vote on bonds. Address The Mayor.

Okla., Mangum—(Road, Bridge).—Question of calling an election to vote on \$500,000 Greer County bonds is under consideration. Address County Commrs.

Okla., Marietta—(School).—\$3000 of bonds are reported voted. Address The School Board.

Okla., Meeker—(Light, School).—Steps are being taken, it is reported, to hold an election to vote on light and school bonds. Address The Mayor.

Okla., Miami—(School).—Bids will be received until 8 P. M. Feb. 28 for \$43,000 of 5 per cent. 25-year bonds. E. F. Lehman is Secy. Bd. of Education.

Okla., Muskogee—(State Fair Grounds).—\$100,000 of bonds are voted. Address Board of City Commrs.

Okla., Quapaw—(Water, Sewer).—Election is to be held March 14 to vote on \$57,000 water-works and \$22,500 of 6 per cent. 25-year sewer bonds. Address The Mayor.

Okla., Pauls Valley—(Water, Sewer, Fire Dept., Park).—\$25,000 water and sewer, \$3000 fire dept., \$15,000 park and building, 5 per cent. 20-year \$1000 denomination bonds are voted. Date for opening bids not yet decided. Address The Mayor.

Okla., Stillwater—(School, Water).—Election will probably be called in near future to vote on \$60,000 of school bonds, also bonds for water-works. Address The Mayor.

Okla., Stroud—(School).—\$44,000 bonds are reported voted. Address School Board.

Okla., Tulsa—(Road).—\$1,040,500 city and \$1,750,000 Tulsa County bonds have been approved by the Atty.-Gen. and it is stated they will now be placed on the market. Address County Commrs.

S. C., Chester—(Bridge, Road).—Election is to be held in Chester County to vote on \$450,000 bonds. Address County Commrs.

Tex., Athens—(Road).—Bids will be received until 2 P. M. March 13 for \$50,000 Road Dist. No. 7 and \$40,000 Road Dist. No. 10, Henderson County, bonds. J. A. McDonald is County Judge.

Tex., Austin—(School).—State Board of Education has purchased \$63,000 of school bonds.

Tex., Austin—Bonds approved by Atty.-Gen.: \$16,000 of 5 per cent. series E. Galveston refunding; \$23,000 McAllen Independent School District 5 per cent. 40-year; \$11,000 of 5 per cent. series C, Galveston, refunding; \$400,000 of 5 per cent. 10-30-year Dickens County road; \$1500 of 5-20-year San Saba County common school District No. 28; \$50,000 of 5 per cent. Austin school; \$500 20-year Smith County school District No. 6; \$1500 of 5 per cent. 20-year Smith County District No. 55; \$200 of 5 per cent. 20-year Comanche County School District No. 68; \$50,000 District No. 2, and \$130,000 District No. 1, 5 per cent. 10-30-year Eastland County road.

Tex., Ballinger—(Road).—Commrs., Court Runnels County has refused to call an election to vote on \$75,000 of bonds.

Tex., Beaumont—(Park).—Bids will be opened March 12 for \$100,000 of fair park bonds. J. G. Sutton is City Secy.

Tex., Clarendon—(Road).—Election will probably soon be held in Donley County to vote on \$30,000 bonds. Address County Commissioners.

Tex., Cleburne—(Road).—\$65,000 Johnson County bonds are voted. Address County Commrs.

Tex., Dallas—(Home).—Election is to be held in April to vote on \$25,000 of bonds to erect a home for newsboys. Address Commr. of Finance and Revenue.

Tex., Dickens—(Road).—\$400,000 or 5½ per cent. 10-30-year Dickens County bonds have been purchased at 96.75 by Powell, Garard & Co., Chicago, Ill.

Tex., Electra—(Sewer).—\$45,000 of bonds recently voted are 30-year 5½ per cents. T. M. Hoxie is City Secy.

Tex., Fort Worth—(Road).—Election to vote on \$600,000 of bonds will probably be held in Tarrant County. Address County Commrs.

Tex., Lufkin—(Road).—Angelina County road bonds are voted. Address County Commrs.

Tex., Quanah—(Road).—No election has been ordered as yet to vote on Hardeman County Bonds. Address County Commrs.

Tex., Jourdanton—(Road).—\$250,000 of bonds of Puget Sound to the Gulf Highway District through Districts 1 and 4, Atascosa County, are voted. Address County Commrs.

Tex., Tyler—(Road).—Election is to be held in Road District No. 3, Smith County, to vote on \$10,000 of bonds. Address County Commrs.

Va., Clifton Forge—(Bridge).—\$15,000 of 5 per cent. 15-30-year bonds have been purchased at 100.125 by the First National Bank of Clifton Forge.

W. Va., Elm Grove—(Street, Sewer, Fire Apparatus).—No satisfactory bids were received Jan. 10 for the \$75,000 of bonds offered on that date. It is stated the bonds will be sold locally in small allotments. G. W. Campbell is Mayor.

W. Va., Montgomery—(Town Building, Fire Department).—Election is to be held Feb. 27 to vote on \$30,000 of bonds for new town building and to provide fire trucks. Address The Mayor.

W. Va., Wayne—(Road).—Election is to be held in Wayne County March 29 to vote on \$1,000,000 of bonds. Address County Commrs.

#### FINANCIAL NOTES

The annual convention of the Texas State Bankers' Association is to be held at the Hotel Galvez, Galveston, Tex., on May 14, 15 and 16. Howell E. Smith of McKinney is Pres., and W. A. Farnpart, Jr. of Dallas is Secy.

## We Finance

Electric Light, Power and Street Railway Enterprises  
with Records of Established Earnings

## We Offer

Bankers and Investment Dealers  
Proven Public Utility Securities  
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## Electric Bond and Share Company

(Paid-up Capital and Surplus, \$21,000,000)

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## LOANS MADE TO STATES, CITIES, COUNTIES, ETC.

Also Entire Issues of Bonds of Successful  
Industrials Purchased

Largest Capital and Surplus of Any Financial Institution in Maryland or  
Any Southern State.

Established 1894

Resources \$21,000,000

## MERCANTILE TRUST and DEPOSIT CO. OF BALTIMORE

A. H. S. POST, President

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## Twenty-Five Years' Experience

## AUDITORS ACCOUNTANTS COST ACCOUNTING

New York, Louisville, Augusta, St. Louis, Baltimore, Pittsburgh, Cincinnati, Richmond,  
Chicago, Milwaukee, Columbus, Grand Rapids, Detroit, and West Virginia References.

## State Public Service Utility Audit and Investigating Co., Inc.

300-307 Kanawha National Bank

CHARLESTON, WEST VIRGINIA

## COUNTY, SCHOOL AND DISTRICT BONDS

The Mercantile Trust Company, Saint Louis, through its Bond Department, is always  
in the market for County, School and District Bonds. We have the facilities for  
handling whole issues of County, School and District or Municipal Bonds and all mat-  
ters pertaining to them. We will be glad to hear from banks or investors who may  
wish to buy or sell high-grade bonds.

MERCANTILE TRUST CO., ST. LOUIS, MO. Capital and Surplus,  
\$9,500,000

## We Buy

City, County  
School and Drainage

## BONDS

FROM MUNICIPALITIES OR CONTRACTORS

We are in position to pay HIGHEST PRICES

Write or wire us your offerings

THE NEW FIRST NATIONAL BANK Assets, \$5,000,000 COLUMBUS, O

## W. L. SLAYTON & CO.

TOLEDO, OHIO

DEALERS IN

CITY  
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TOWNSHIP

## BONDS

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If you want to Buy or Sell, write for Prices

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## THE HOTEL ESSEX

BOSTON, MASS.

Opposite South Terminal Station

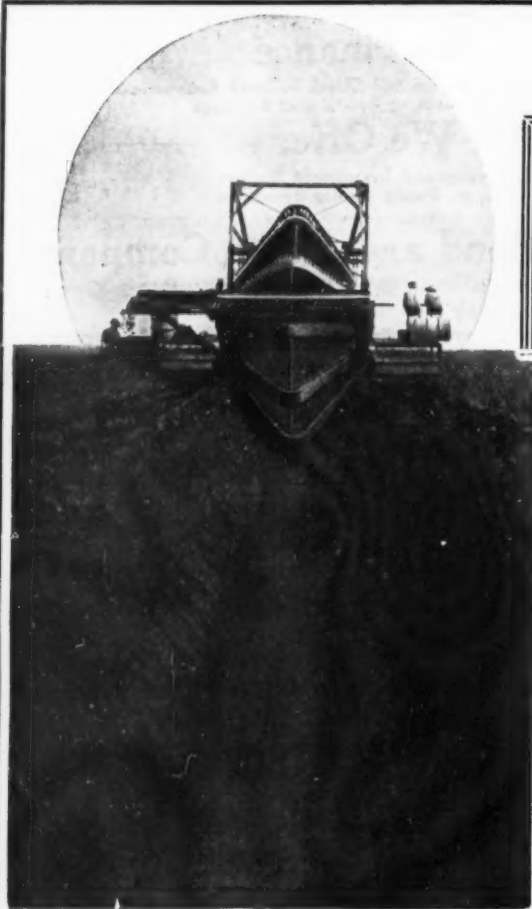
EUROPEAN PLAN.

RATES MODERATE.

Free Transfer Baggage from and to Station.

Terminal of Trains from South and West.

DAVID REED, Manager



Rear View of No. 6 Open Ditcher making clean-cut, true-to-grade ditch

## A Perfect Trench at One Cut With the Buckeye

and leave the ditch clean-cut and true to grade by once passing over the ground. The Buckeye line consists of nine different size Open Ditchers. Especially suitable for wet soil. In successful use today in Florida and Louisiana under the hardest test.

In Louisiana, No. 2 and No. 3 machines excavated and finished 14 miles of trench per day.

Another 9-foot machine operating in Florida, in one month's time excavated 38,985 cubic yards at 2 3/4¢ per cubic yard, allowing for a depreciation of 24%, interest at 6% and all incidental charges, such as extra freight, boat hire, board of the men, etc.

In Louisiana several No. 2 Open Ditchers are working under a wide variety of soil conditions. Their average, extending over a period of several months, is better than one-half a mile of completed ditch daily.

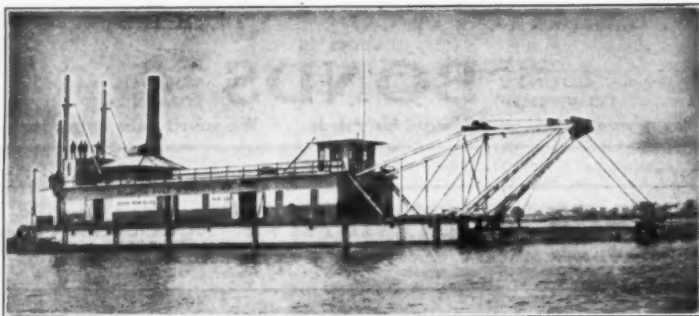
Write for illustrated catalogue with full details.

**The Buckeye Traction Ditcher Co.**  
**FINDLAY, OHIO**

## Atlantic, Gulf and Pacific Co.

NEW YORK MANILA, P. I. HOUSTON, TEX.

Contractors to the Federal Government



**Dredging and Filling, Land Reclamation,  
Canals and Port Works**

**River and Harbor Improvements, Deep  
Waterways and Ship Channels**

We are especially equipped to execute all kinds of dredging, reclamation, and port works in Southern waters.

Correspondence invited from Southern officials and corporate and private interests everywhere.

*Largest Plant*

*Longest Experience*

## Strayer's Business College, Inc.

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Fully accredited by the National Association of Accredited Commercial Schools. Teaching latest methods in Shorthand, Typewriting and Commercial Subjects. Departments headed by Degree Teachers.

The Government needs TEN THOUSAND STENOGRAPHERS, and a representative of the Civil Service Commission visited Strayer's Business College last week and urged us to provide as many as possible.

This is YOUR opportunity. Classes now open. Day and Night School all the year. Enroll at once. Write us today.

Proposals advertised in the Manufacturers Record bring good results.

## THE GRUNEWALD

THEO. GRUNEWALD, Proprietor



**New, Modern  
Best Equipped and Finest  
Hotel in the South**

**Cost Over \$2,000,000**

**400 Rooms European Plan**

**RATES:**

**\$1.00 and Upwards. With Bath,  
\$2.50 and Upwards.**

**NEW ORLEANS**



# PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS

More Southern Proposal Advertising Is Printed In The Manufacturers Record Than In Any Other Paper

Bids close March 23, 1918.

**PROPOSALS FOR GENERATOR SETS,** Switchboards, Copper Cable, End Bell, Transformers, Connectors, Terminals, Receptacles, Copper Rod, Bus-bar Supports, Pipefittings, and Floor Flanges. Sealed proposals will be received at the office of the General Purchasing Officer, The Panama Canal, Washington, D. C., until 10:30 o'clock A. M. March 23, 1918, at which time they will be opened in public, for furnishing the above-mentioned articles. Blanks and information relating to this Circular (1203) may be obtained from this office or the offices of the assistant purchasing agents, 24 State Street, New York City; 606 Common Street, New Orleans, La.; and from the United States Engineer offices in the principal cities throughout the United States. A. L. FLINT, General Purchasing Officer.

Bids close April 3, 1918.

**TREASURY DEPARTMENT,** Supervising Architect's Office, Washington, D. C., February 21, 1918. Sealed proposals will be opened in this office at 3 P. M. April 3, 1918, for the construction of entrances for three safety vaults and furnishing certain vault lining and infusible metal alloy shapes for the United States Assay Office at New York, N. Y. Drawings and specifications may be obtained from the supervising chief engineer, Room 731, United States Custom-house, New York, N. Y., or at this office, in the discretion of the Supervising Architect. JAS. A. WETMORE, Acting Supervising Architect.

Bids close March 19, 1918.

**TREASURY DEPARTMENT,** Supervising Architect's Office, Washington, D. C., February 18, 1918. Sealed proposals will be opened in this office at 3 P. M. March 19, 1918, for a toilet-room for women in the United States Custom House, Norfolk, Va., in accordance with the specification and drawings, copies of which may be had at this office or at the office of the Custodian, Norfolk, Va., in the discretion of the Supervising Architect. JAS. A. WETMORE, Acting Supervising Architect.

Bids close April 1, 1918.

**PROPOSALS FOR DREDGING,** U. S. Engineer Office, Baltimore, Md. Sealed proposals for dredging in channel to Curtis Bay, Md., will be received here until 1 P. M. April 1, 1918, and then opened. Further information on application.

Bids close March 19, 1918.

## \$150,000 5% Refunding Bonds

Montgomery, Ala. Sealed proposals will be received by the Board of Commissioners of the City of Montgomery until 11 o'clock A. M. Tuesday, March 19, 1918, for the purchase of all of an issue of \$150,000 5 per cent. Refunding Bonds.

Said bonds will be issued to refund \$150,000 bonds issued to build Sanitary Sewers on May 1, 1888, which mature May 1, 1918, and will be coupon bonds of the denomination of a thousand dollars each, and will be dated May 1, 1918, and will mature May 1, 1948, bearing interest at the rate of 5 per cent. per annum, payable semi-annually on the first days of May and November of each year. Both principal and interest of said bonds will be payable at the office of the Old Colony Trust Company in the City of Boston in gold coin of the United States of America of the present standard weight and fineness.

Said bonds will be sold at not less than par and accrued interest from the date of the bonds to the date of delivery. The right is reserved to reject any and all bids.

Proposals should be addressed to C. J. Fay, Clerk of the City of Montgomery, and enclosed in a sealed envelope, marked on the outside, "Proposal for Refunding Bonds," and must be accompanied by certified check for \$150,000, payable to the order of G. W. Barnett, City Treasurer. Checks of unsuccessful bidders will be returned upon the award of the said bonds.

The successful bidder will be furnished with the opinion of Messrs. Storey, Thorndike, Palmer & Dodge, Attorneys, of Boston, that the bonds are binding and legal obligations of the City of Montgomery. The bonds will be prepared under the supervision of the Old Colony Trust Company of Boston, who will certify as to the genuineness of the signatures of the city officials and of the seal impressed thereon. Bonds will be free from taxation.

By order of the Board of Commissioners.  
Dated January 15, 1918.

C. J. FAY,  
Clerk of the City of Montgomery.

Bids close March 5, 1918.

## \$10,000 5% School Bonds

Notice is hereby given that the Board of Public Instruction of Marion County, Florida, will receive bids for the purchase of ten bonds of the denomination of \$1000 each, bearing 5 per cent. interest, payable annually, and maturing within twenty years from date, up to 2 P. M. on Tuesday, March 5, 1918. Bids must be accompanied by certified check for 3 per cent. of the amount of the bid as a guaranty of the performance of the terms of the bid.

Address all communications to J. H. Brinson, Superintendent, Ocala, Fla.

## PROPOSAL ADVERTISING INFORMATION

**RATE:** 25 cents per line per insertion.

**PUBLICATION DAY:** Thursday.

**FORMS CLOSE** 5 P. M. Tuesday. Copy received later cannot be published until issue of following week.

**DAY LETTER:** When too late to send copy by mail to reach us by 5 P. M. Tuesday, forward by day letter.

### THE DAILY BULLETIN OF THE MANUFACTURERS RECORD:

Published every business day; gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened, or when daily publications are necessary to meet legal requirements.

The same rate applies—25 cents per line per insertion.

Bids close April 1, 1918.

## \$18,000 5% Bonds

City of Quincy, Florida, offers for sale to the highest and best bidder for cash, serial bonds of said city in the sum of eighteen thousand dollars, payable May 1, A. D. 1936, bearing interest at rate of 5% per annum, said interest payable semi-annually on the first day of May and the first day of November of each year; bonds to be in the denomination of \$500, two of which, to be determined by the City Council of said city by lot, shall be retired on the 15th day of May of each and every year after the year A. D. 1918.

Sealed bids for the purchase of said bonds will be received at the office of City Clerk of the City of Quincy, Florida, until 11 o'clock A. M. April 1, 1918, and each bid must be accompanied by a certified check for 10 per cent. of the par value of the bonds bid for, as evidence of good faith of the bidder, and to pay all damages the said City of Quincy may sustain on account of the non-compliance of the bidder with the terms of his said bid. The City of Quincy reserves the right to reject any and all bids, and no bid will be accepted for less than the par value of said bonds.

CITY OF QUINCY.

By W. E. SHELTER,  
President City Council.

J. P. SMITH,  
City Clerk.

Bids close March 9, 1918.

## \$230,000 5% Bonds

Abilene, Texas, February 2, 1918. Notice is hereby given that the City of Abilene, Texas, will receive sealed bids not later than 2 o'clock P. M. March 9, 1918, for the purchase of \$230,000 Reservoir Bonds, to be dated February 15, 1918, issued in denominations of \$1000 and due in 40 years, with the option to redeem in ten years from date, and bearing interest at 5 per cent. per annum, payable semi-annually, said interest payable in Abilene, Texas, with exchange on New York.

All bids to be accompanied by certified check in the sum of \$4000, payable to E. N. Kirby, Mayor of said City of Abilene. The City of Abilene reserves the right to reject any and all bids made for said bonds. Bids should be addressed to H. L. Roberts, City Secretary, Abilene, Texas.

H. L. ROBERTS,  
City Secretary.

Bids close April 1, 1918.

## \$50,000 5% Bonds

Watauga County, North Carolina, offers Fifty Thousand Dollars (\$50,000) Good Roads Bonds, 5 per cent., semi-annual interest, serial issue, 5 to 30 years, sealed bids April 1, 10 A. M. Certified check vouchered for by local bank, 1 per cent. of bid required. For information write W. R. Gragg, Clerk Board of Commissioners at Boone, North Carolina. W. R. GRAGG, Clerk Board County Commissioners.

Bids close March 5, 1918.

## Road Work

Sealed proposals will be received until 3:30 P. M. Tuesday, March 5, 1918, by the Board of Commissioners of the Arkansas-Louisiana Highway Improvement District at their office in McGehee, Arkansas, for the grading, drains, paving and other work contemplated by the plans of the District for the construction of approximately forty-one miles of Macadam Roadway and one hundred and twelve miles of Mixed Method Asphalt Roadway.

Separate proposals will be received for the work embraced in each of five sections or for the work as a whole. Plans may be seen at the office of the Secretary at McGehee and at the office of the Engineers of the District at Little Rock, Arkansas. Specifications may be obtained free from the Engineers and necessary plans may be obtained also from the Engineers upon the payment

of \$3 per set, to cover the cost of blue-printing. No refund will be made for plans returned.

Proposals must be sealed and addressed to M. E. Sherland, Secretary, McGehee, Ark., and must be accompanied by an unconditional certified check on a national bank or by a bidder's bond made by a surety company doing business in Arkansas for not less than 3 per cent. of the value of all work bid upon.

The Board of Commissioners reserves the right to reject any and all proposals submitted.

J. A. BENNETT,  
President Board of Commissioners.  
M. E. SHERLAND,  
Secretary.

FORD & MACCREA,  
Engineers for District,  
Little Rock, Ark.

Bids close March 5, 1918.

## Oiling Roads

STATE OF MARYLAND.  
STATE ROADS COMMISSION.  
NOTICE TO CONTRACTORS.

Sealed proposals for oiling two sections of State Highway, requiring approximately 778,286 gallons of oil, as follows:

Division.	Miles.	Gallons.
No. 5—Montgomery (Part), Frederick, Howard, Carroll and Washington (Part)	187.82	506,976
Counties		
No. 6—Washington (Part), Al- legany and Garrett Coun- ties	122.62	271,310
	310.44	778,286

Will be received by the State Roads Commission at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 5th day of March, 1918, at which time and place they will be publicly opened and read.

Bids must be made upon the blank form contained in the book of specifications. Specifications and plans will be furnished by the Commission upon application.

No bids will be received unless accompanied by a certified check for the sum of Two Hundred (\$200) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 19th day of February, 1918.

FRANK H. ZOUCK, Chairman.  
CLYDE H. WILSON, Secretary.  
The right is reserved to increase or diminish the above quantities 10 per cent.

Bids close March 5, 1918.

## Steel Bridge

Board of Supervisors of Clarke County, Miss., will let contract for steel bridge at 12 M. on March 5, 1918, at Quitman, Miss. For particulars apply to W. H. Foster, Clerk, Quitman, Miss.

Bids close March 11, 1918.

## Jail Improvements

Bids for minor repairs, new plumbing and heating installations and steel cell work on County Jail, Palatka, Florida, will be received by the Board of County Commissioners of Putnam County, Florida, on or before noon March 11, 1918. Mark & Sheftall, 210 Clark Building, Jacksonville, Florida, will furnish plans and specifications on receipt of check for \$5, which will be refunded when plans and specifications are returned to architects in good order.

The Board reserves the right to reject any or all bids.

Palatka, Florida, this February 14, 1918.  
R. J. HANCOCK,  
Clerk, Board of County Commissioners,  
Putnam County, Florida.

Bids close March 4, 1918.

## Motor Truck

The City Council of the City of Kinston, N. C., will receive bids on or before March 4, 1918, for a motor truck, one and two-ton capacity. The city reserves the right to reject any and all bids made. Address bids to W. T. Coleman, Clerk.

Bids close March 8, 1918.

## Drainage Ditches

Sealed proposals will be received by the undersigned for the construction of certain ditches in Beasler and Luneluh Drainage Districts in Neshoba County, Mississippi, until noon March 8, 1918, at the Court House in Philadelphia, Miss. A single proposal being asked for the two districts.

Certified check for \$1000 must accompany each bid. Successful bidder to give bond in the sum of the contract bid.

Plans and specifications are on file in the office of the Chancery Clerk of Philadelphia, Miss., and in the office of S. A. Redding, Consulting Engineer, Louisville, Miss.

J. W. RAY,  
Secretary Beasler Drainage District.  
J. W. SPIVEY,  
Secretary Luneluh Drainage District.

Bids close March 5, 1918.

## Automobile Number Plates

STATE OF TENNESSEE.  
DEPARTMENT OF HIGHWAYS.

Nashville, Tenn.

Bids will be received up to 12 o'clock noon of Tuesday, March 5, 1918, at the office of the State Department of Highways, 327 Seventh Avenue North, Nashville, Tennessee, for approximately:

60,000 pairs Automobile Number Plates.

1,500 pairs Motorcycle Number Plates.

750 pairs Demonstration Number Plates.

Bids to be taken separately on 23 gauge, 24 gauge and 26 gauge steel (U. S. Standard).

Specifications and blank proposals will be furnished upon application to the State Department of Highways, Nashville, Tennessee. STATE DEPARTMENT OF HIGHWAYS.

By J. J. Murray, Secretary.

February 11, 1918.

Bids close March 14, 1918.

## Dredging

Sealed proposals will be received by the Board of Drainage Commissioners of Fayette County Drainage District No. 1, at the office of the Secretary, Lester C. Dickson, Fayetteville, Ga., until 11 o'clock A. M. March 14, 1918, for dredging Camp Creek, situated in the western part of Clayton County and the northeastern part of Fayette County. The channel crosses the Southern Railway, Fort Valley Division, at Helmer, Ga., six miles northeast of Fayetteville, Ga.

This is a floating-dredge proposition; no hand work is proposed. Two lateral ditches will be excavated. The main ditch, nine and one-half miles in length, 216,500 cubic yards excavation; Dodd and McLeary branches, 12,500 cubic yards excavation. 60 acres clearing. All other items force account and percentage. Work to be completed one year from date.

A certified check, payable to the Board of Drainage Commissioners, for the sum of \$500 must accompany each proposal, and an acceptable surety bond for 50 per cent. of the contract cost will be required. Payment will be made in cash for 90 per cent. of monthly estimate.

Plans and specifications may be inspected at the office of the Secretary, Fayetteville, Ga.; at the home of the Chairman, S. E. Davidson, Helmer, Ga., postoffice address, Kenwood, Ga., and at the office of Knox T. Thomas, Drainage Engineer, 602 Forsyth Building, Atlanta, Ga.

The right is reserved to reject any and all bids and to accept any bid that the interest of the Drainage Board may require.

S. E. DAVIDSON, Chairman;  
J. M. AUSTIN,  
E. E. ROUNTREE,  
Commissioners Fayette County  
Drainage District No. 1.

If You Would Like to Know  
Whether An Advertisement  
in the "Southern Shops  
Department"

## PAYS

Write us for the opinions of advertisers in it. Their testimony will convince you that you are overlooking valuable and profitable business if you are in a position to handle some extra.

## CONTRACT WORK

Rates and full information upon request

# Classified Opportunities

## MINERAL AND TIMBER LANDS WATER POWERS MISCELLANEOUS PROPERTIES

**FOR SALE?** Farm, timber land, mineral property or any other? We can help you get in touch with possible purchasers by an advertisement in these columns. For rates see head of this department.

### LIMESTONE LAND

**VALUABLE LIMESTONE FOR SALE.** 160 acres limestone of high grade, suitable for flux, on C. & O. Railway, near the glass factories and other enterprises needing flux at Charleston, W. Va. For further information write R. B. Holt, Lewisburg, W. Va.

### ZINC LAND

**WE handle zinc lands in North Arkansas,** both developed and undeveloped, in the best zinc field in the world. McCarty & Angel, Yellville, Ark.

### PHOSPHATE ROCK

**FOR SALE—Two million tons of blue rock phosphate in the ground near Mt. Pleasant, Tenn., running from 53 to 72 per cent. bone phosphate of lime; spur of the L. & N. R. runs through it; locating the Government nitrate plant at Mussel Shoals, Ala., makes the property more valuable; Mussel Shoals is only 60 miles from Mt. Pleasant. Major W. N. Hughes, U. S. A., 523½ Broadway, Nashville, Tenn.**

### IRON-ORE MINE

**FOR SALE—Excellent magnetic iron-ore mine, opened to a depth of 98½ ft., 8 to 14 ft. thick; vein open 2000 ft. long; railroad at mines; analysis, 97.92. W. A. Pedigo, Roanoke, Va., with Stras & Persinger.**

### PYRITES MINE

**FOR SALE—The best pyrites mine in the South; unlimited quantity; railroad through property. Property has been explored. Can furnish Engineer's report. Southern Real Est. & Loan Co., 513 Empire Bldg., Atlanta, Ga.**

### MICA MINE

**A RICH MINE OF MICA; will sacrifice heavily for cash and quick sale. Have other business, requiring my attention. Address F. M. Taylor, Holly Springs, Ga.**

### MANGANESE ORE LANDS

**760 ACRES MANGANESE ORE LANDS for sale; engineer's estimate, 800,000 tons; railroad one mile; now mining with pick and shovel; analysis and records available. Address Doak Aydelott, Tullahoma, Tenn.**

### COAL

**COAL—Would like to get in touch with manufacturing concern to use all or part output of mine now shipping and assist in financing it. Box 1047, Charleston, W. Va.**

### HARDWOOD TIMBER TRACT WANTED

**WANTED.—I have a client who is in the market for a tract of hardwood timber from one to five thousand acres if price is right. W. N. Bee, Parkersburg, W. Va.**

### TIMBER LAND

**TIMBER LAND—RECEIVER'S SALE.** 2180 acres pine, oak, gum and ash. North end Liberty county, Texas, between Batson Oil Field and Davis Hill. Oil possibilities. Will sell timber separately. C. R. Cummings Export Co., T. L. Smith, Jr., Receiver, 15 Main St., Houston, Texas.

**FOR SALE—In Whitley County, Ky., 1500 acres of timber; cut 5000 ft.; \$10 per acre; 20 per cent. oak and poplar, balance hemlock, pine, etc. \$6 haul to railroad. J. C. Williams, Box 525, Etowah, Tenn.**

**THE BEST TIMBER TRACT in Virginia for sale, containing 1335 acres, estimated to cut twenty million feet of timber and 25,000 railroad ties. This tract lies on the Chickahominy River, 1½ miles from the James. Has 15 feet of water short distance from shore. Has deep-water transportation to Norfolk, Baltimore and Philadelphia, New York and Boston. Land is in splendid trucking section and will be worth \$15 to \$25 per acre after the timber is cut off. L. T. Branch Co., 832 E. Main St., Richmond, Va.**

**FOR SALE—1350 acres virgin Georgia timber land. Will produce 10,000 feet per acre. 65% oak. Price and terms reasonable. E. A. Robertson, Box 373, Petersburg, Va.**

### TIMBER

**15,000,000 FEET VIRGIN TIMBER in Caroline County, Va. As fine as grows. Will cut anything. Two-thirds hardwood, mostly white oak, hickory and poplar, balance yellow pine. Good level logging land. Price \$30,000.**

**50,000,000 feet short-leaf pine, Eastern North Carolina. Price \$300,000.** Up-to-date hand mill in Eastern North Carolina; 60,000,000 feet standing timber behind it. Making good money. Price and terms on application. Green & Redd, Ninth and Franklin Sts., Richmond, Va.

## RATES AND CONDITIONS

Rate 25 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 23c. per line; 300 lines, 21c. per line; 500 lines or more, 20c. per line.

### TIMBER

**FOR SALE—Fifty million feet of fine South Carolina timber, consisting of thirty-nine million feet red gum, five million oak, three million cypress, three million short-leaf pine. This timber is very large and of fine quality; easily logged at any time of the year. Price reasonable. Accessible to railroads. Will bear closest investigation. Address No. 5053, care Manufacturers Record.**

### FARM AND TIMBER LANDS

**FOR SALE.** On the Eastern Shore of North Carolina, sandy loam and other rich, producing soils, including three big swamps heavily timbered, easily accessible to water shipping.

**3200 ACRES,** located in a section soon to be touched with industrial shipbuilding and other forms of commercial activity; also well adapted for division into small farms. Will be sold cheap. Address No. 5060, care Manufacturers Record, Balto., Md.

**WE OWN LARGE TRACTS OF TIMBER LANDS, cut-over lands and colonizing lands. If interested, address H. H. Wefel, Jr., & Co., Mobile, Alabama.**

## BUILDING LOTS

**ACREAGE—Near Nitro (Crawford City), W. Va., the location of the Government's \$45,000,000 power plant now under construction, and will soon be employing 30,000 men.**

**I have 61 acres of beautiful laying land overlooking the Government's 1500-acre tract, which is ideal for a lot proposition, at a price that will net the investor several hundred per cent.**

**Quick action is necessary. Write me for price and particulars. E. F. Huddleston, Room 20, Arcade, Charleston, W. Va.**

## FRUIT, FARM AND TRUCK LANDS

**THESE COLUMNS ARE CLOSELY READ BY PEOPLE for information of all kinds about Southern properties of every description. If you have a property of any kind that you want to dispose of, try an advertisement in these columns. Others have to their advantage. For rates see head of department.**

### ALABAMA

**ALABAMA FARM FOR SALE.** 3680 acres; improved; excellent for stock and general farming. Write for descriptive circular. South Ala. Land & Imp. Co., Troy, Ala.

### ARKANSAS

**ARKANSAS DELTA LANDS.—When in the market for Arkansas lands write me fully, stating amount you wish to invest or size tract you want to purchase, either cut-over timber or improved farm. I will give a prompt reply and furnish valuable information regarding St. Francis Valley lands in Arkansas. G. L. Waddell, Osceola, Ark.**

**640 ACRES of rich Arkansas dirt unimproved rich bottom land; don't overflow; well drained; convenient to good towns and trunk-line railroad. Eugene Moseley, Judsonia, Ark.**

### FLORIDA

**A BEAUTIFUL WINTER HOME, a profitable orange and grapefruit grove, a general farm, cattle, hog or poultry ranch in the famous Indian River section, Vero, Florida. The wonderful climate permits not only agricultural operations all the year, but all enjoyable, life-prolonging outdoor sports. Investigate now this wonderfully charming section. Indian River Farms Company, First National Bank Building, Vero, Florida.**

**FLORIDA.—Do you intend visiting the land of health and sunshine this winter? If so, write M. J. Hoening, Prop. Hotel Palms, West Palm Beach, Fla., for instructive booklet.**

**FOR A SAFE and permanent investment, Florida lands and values should interest you. Manatee County is the best location, and is destined to become one of the most progressive settlements in the State and a very profitable settlement. Florida farms in Manatee County are below frost belt; have rich soil, with 355 producing days. Easy terms. Manasota Land & Timber Co., Maryland Casualty Tower Building, Baltimore, Md., and Sarasota, Florida.**

### FLORIDA

**FOR SALE—12,000 acres in St. John's county potato district, 20,000 acres in Manatee county, at a very attractive price. Address P. F. Quinn, Vinton, Iowa.**

### GEORGIA

**BEAULIEU—Prettiest spot on earth; place where angels light. Georgia coast. Unobstructed view east to sea, south as far as eyes can look. Hotel, sanitarium or home, winter and summer. Nothing like it. No malaria. Fish, crabs, shrimp, oysters at door. Then add Beaulieu magnesia mineral water, and vegetables and fruit growing the year 'round. It's for sale. D. B. Lester, Savannah, Ga.**

### MISSISSIPPI

**196-ACRE suburban truck and dairy farm; equipped and running. Situated on paved highway and suburban railroad station, 5 miles Meridian, largest city Miss. 129 acres cultivated, balance woodland. New residence, tenant-house, barn, wire fencing. Farming implements, 9 head cattle, 2 mules, 2 horses, 15 hogs. Selling account ill-health. Sacrifice, \$5500. Frank Heiss, Real Estate, Meridian, Miss.**

### TENNESSEE

**STOCK FARM.—3000 acres, 25 miles from Knoxville, Tenn. Well watered, wire fenced; turns off cattle fat for market. Fine sheep farm. Price \$15 per acre. S. H. Thompson, owner, Bristol, Tenn.**

### TEXAS

**FOR SALE—17,789 acres of land in solid body in Southwest Texas. Fine location for sheep or goat ranch; also in mineral belt, 12 miles from famous Shafter Silver Mine. Price \$1.50 per acre. D. C. Earnest, Dallas, Texas.**

### VIRGINIA

**WE have the finest list of farms for sale ever offered in Virginia. Several on the James River, York, Nansemond, Chuckatuck and other rivers, also on Broad Bay, Linkhorn Bay, also many inland farms. Be sure and write for our list. We can suit you at any size or price. H. C. Hoggard & Co., Norfolk, Va.**

**VIRGINIA FARMS AND LARGE TRACTS.** 640 acres on the James River, 16 miles above Newport News, nearly three miles of beautiful water frontage, 20 to 30 feet above the water; fine land. Will divide into 100 or more acre tracts if desired; \$50 an acre. H. C. Hoggard & Co., Norfolk, Va.

**FOR SALE—The following farms in Sussex County, Va.: 400-acre old Colonial place, with buildings; 82-acre farm, 7-room dwelling; 185-acre farm site. All located in good farming district. Apply R. H. Payne, Waverly, Va.**

**FARMS a specialty, large or small, any size wanted. Write us your wants. E. B. Moore & Co., 201 Mechanics Bldg., Petersburg, Va.**

## TECHNICAL TRAINING

**TRAIN through our practical home-study course as a draftsman and promptly accept a position at a first-class salary. Tremendous demand for our graduates, who receive \$35 to \$50 a week, with chances of promotion. Big opportunity. Get particulars at once. Dept. M, Columbia School of Drafting, 10th and G Sts., Washington, D. C.**

## BUSINESS OPPORTUNITIES

**WILL PURCHASE electric light and water-works properties having established earnings and located in substantial growing communities. Give particulars concerning present annual gross earnings and franchise conditions. Address Treasurer, P. O. Box 1136, Providence, R. I.**

**CAPITAL WANTED.—A going paper-manufacturing concern in the South needs \$10,000 to \$15,000, either silent or active man with the money, to whom an attractive proposition can be made. Details on inquiry from responsible parties gladly given. Address No. 5047, care Manufacturers Record, Balto., Md.**

## BUSINESS OPPORTUNITIES

**PARTNER.—Have invention, will be cheaply manufactured, and will sell everywhere. Want partner with some money to help bring it out. Will convince anyone interested. Postoffice Box No. 1, Keota, Col.**

### PARTNER WANTED.

**On account of the fifty-million-dollar permanent Government development in the immediate vicinity, the lumber and planing business of the undersigned is in need of additional capital and a capable man to assist the two present owners. If you have \$10,000 to invest and are a hustler, let us give you the details of a good proposition. Address No. 5029, care Manufacturers Record.**

**FARMING OPPORTUNITIES AND INDUSTRIAL SITES along the Winston-Salem Southbound Ry. Co. Here climate, soil, transportation, good roads, fine schools and excellent markets contribute to the success of farming, and the large and prosperous industrial centers along our lines offer splendid locations for industries of various kinds. Address S. P. Collier, Jr., Winston-Salem, N. C.**

**SEVEN BRICK STORE BUILDINGS, with modern theater in rear of same, on same lots. This property is on best corner, all in one block, in one of the most thriving manufacturing towns of North Carolina. Will exchange for large, improved farm in Eastern Virginia or North Carolina. Farm must be on some watercourse. As to income and further information on this property, write Box 124, Roanoke Rapids, N. C.**

**WITH LONG EXPERIENCE in building, designing and operating wood-distilling plants, am open to proposition to join going concern in executive capacity, or to co-operate in organization of new company large enough to handle Government contracts. Will assume entire responsibility of designing and operating plant. Address No. 5055, care Manufacturers Record.**

**WILL CREATE and manage an export department for a progressive manufacturing firm. Salary \$8000 per annum and 25% of the net profits. Address No. 5056, care Manufacturers Record, Baltimore, Md.**

**TURN YOUR FARM, town lots, etc., into cash. Any place. Auction or private high-pressure selling. National Realty Sales Co., Charleston, W. Va.**

**FACTORY BUILDING.—Brownsville, Tex., new gateway to Mexico; 140,000 sq. ft. floor space; 1, 2 and 4 stories; brick, heavy construction, very best repair; site, 3 city blocks; railway terminals; local conditions warrant cotton mill, sugar refinery, cold-storage or bonded warehouse; cheapest labor in U. S.; under lease to U. S. Govt. Will sell for half construction cost today. If you mean business, address E. R. T. Howard, owner, The Armadillo Mills, Brownsville, Texas.**

## APPLES

**ALBEMARLE PIPPINS—The finest flavored apples in the world, the favorite apple of the late Queen Victoria and of the present Royal Family of England. Our apples have not been in cold storage, and ripen naturally with the most delightful aroma and exquisite flavor. A letter from Mr. Richard H. Edmonds, the noted authority of Southern industries, now in Florida, states that the apples we had shipped him there reached him safely, were very delicious and greatly enjoyed. Let us send you a box or a barrel of Albemarle Pippins or of Winesaps, grown in the mountains of this favored section of Albemarle County. The Albemarle Orchard Co., Charlottesville, Va.**

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**"PRUDENTIAL" STEEL BUILDINGS for all purposes; portable one-story construction; workshops, toolhouses, storage, garages, bunkhouses, etc. Write for Catalog A. C. D. Pruden Company, Baltimore, Md.**

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